

The copyright © of this thesis belongs to its rightful author and/or other copyright owner. Copies can be accessed and downloaded for non-commercial or learning purposes without any charge and permission. The thesis cannot be reproduced or quoted as a whole without the permission from its rightful owner. No alteration or changes in format is allowed without permission from its rightful owner.



**DISCOURAGED BORROWERS: EVIDENCE FROM  
MALAYSIAN SMES**



**ROPIDAH OMAR**

**UUM**  
Universiti Utara Malaysia

**DOCTOR OF PHILOSOPHY  
UNIVERSITI UTARA MALAYSIA**

**July 2018**

**DISCOURAGED BORROWERS: EVIDENCE FROM MALAYSIAN SMES**

By

**ROPIDAH OMAR**



**UUM**  
Universiti Utara Malaysia

**Thesis Submitted to  
Othman Yeop Abdullah Graduate School Of Business,  
Universiti Utara Malaysia,  
in Fulfillment of the Requirement for the Degree of Doctor of Philosophy**



**Kolej Perniagaan**  
(College of Business)  
**Universiti Utara Malaysia**

**PERAKUAN KERJA TESIS / DISERTASI**  
(Certification of thesis / dissertation)

Kami, yang bertandatangan, memperakukan bahawa  
(We, the undersigned, certify that)

**ROPIDAH OMAR**

calon untuk Ijazah  
(candidate for the degree of)

**DOCTOR OF PHILOSOPHY (FINANCIAL ANALYSIS & POLICY)**

telah mengemukakan tesis / disertasi yang bertajuk:  
(has presented his/her thesis / dissertation of the following title):

**"DISCOURAGED BORROWERS: EVIDENCE FROM MALAYSIAN SMES"**

seperti yang tercatat di muka surat tajuk dan kulit tesis / disertasi.  
(as it appears on the title page and front cover of the thesis / dissertation).

Bahawa tesis/disertasi tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan, sebagaimana yang ditunjukkan oleh calon dalam ujian lisan yang diadakan pada:  
**10 April 2017.** (That the said thesis/dissertation is acceptable in form and content and displays a satisfactory knowledge of the field of study as demonstrated by the candidate through an oral examination held on: **10 April 2017**).

Pengerusi Viva  
(Chairman for Viva)

: **Prof. Dr. Nor Azila Mohd Noor**

Tandatangan  
(Signature)

Pemeriksa Luar  
(External Examiner)

: **Prof. Madya Dr. Razali Haron**

Tandatangan  
(Signature)

Pemeriksa Dalam  
(Internal Examiner)

: **Prof. Dr. Fauziah Md. Taib**

Tandatangan  
(Signature)

Tarikh: **10 April 2017**  
(Date)

Nama Pelajar  
(Name of Student)

: Ropidah Omar

Tajuk Tesis / Disertasi  
(Title of the Thesis / Dissertation)

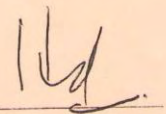
: Discouraged Borrowers: Evidence From Malaysian SMEs

Program Pengajian  
(Programme of Study)

: Doctor Of Philosophy (Financial Analysis And Policy)

Nama Penyelia/Penyelia-penyelia  
(Name of Supervisor/Supervisors)

: Prof. Dr. Wan Nordin Wan Hussin



Tandatangan

## **PERMISSION TO USE**

In presenting this thesis in fulfillment of the requirements for a Post Graduate degree from the Universiti Utara Malaysia (UUM), I agree that the Library of this university may make it freely available for inspection. I further agree that permission for copying this thesis in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor(s) or in their absence, by the Dean of Othman Yeop Abdullah Graduate School of Business where I did my thesis. It is understood that any copying or publication or use of this thesis or parts of it for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the UUM in any scholarly use which may be made of any material in my thesis.

Request for permission to copy or to make other use of materials in this thesis in whole or in part should be addressed to:

Dean of Othman Yeop Abdullah Graduate School of Business  
Universiti Utara Malaysia  
06010 UUM Sintok  
Kedah Darul Aman



## ABSTRACT

Small and medium-sized enterprises (SMEs) contribute substantially to the nation's economic growth. Loan from banks have been the most common form of financing among SMEs due to limited internal generated fund. However, obtaining financing from banks is mostly challenging to many SMEs. In Malaysia, there were bundles of bank loan facilities offered by many financial institutions. This fact is affirmed by the World Bank that Malaysia has been the top-ranked country to provide ease of obtaining credit for six consecutive years from 2008 to 2013. The aim of this study is to identify the characteristics of SMEs and other factors that discouraged them from applying bank loans. This study considers the borrowers (SMEs) perspective instead of the loan provider as cited by most literatures. A total of 1,425 self-administered questionnaires were distributed to a randomly selected sample of Malaysian SMEs registered with SME Corporations, covering all the four regions in West Malaysia. The number of usable questionnaires was 110 responses, yielding about 12.67 percent response rate. The discouraged borrower model in this study was tested using logistic regression analysis. The results indicate that size and age of the SMEs are significant predictors of SMEs being discouraged from applying for bank loan. Gender, experience and ethnicity of the owner/manager of the SMEs are also significantly related to their discouragement. Finally, the application costs that includes financial, in-kind and psychic costs are also significant determinants of SMEs discouraged from applying for bank loan. The results of this study support the Theory of Discouraged Borrowers hence contributes useful input to bankers or loan providers in considering small and opaque firms in marketing their services. Additionally, this study also shed some lights to policy makers in their effort to encourage bankers to provide easily obtainable loan to SMEs or such groups.

**Keywords:** small and medium-sized enterprises (SMEs), bank loan, discouraged borrower, firm characteristics

## ABSTRAK

Perusahaan kecil dan sederhana (PKS) banyak menyumbang kepada pertumbuhan ekonomi negara. Pinjaman bank telah menjadi satu bentuk pembiayaan yang biasa di kalangan PKS kerana dana dalaman yang diwujudkan adalah terhad. Walau bagaimanapun, mendapatkan pembiayaan dari bank adalah sangat mencabar bagi kebanyakan PKS. Di Malaysia, terdapat pelbagai kemudahan pinjaman bank yang ditawarkan oleh institusi kewangan. Hal ini diperakui oleh Bank Dunia yang menyatakan bahawa Malaysia adalah negara yang berada pada kedudukan teratas dalam menyediakan kemudahan mendapatkan kredit selama enam tahun berturut-turut, bermula dari tahun 2008 hingga 2013. Objektif kajian ini adalah untuk mengenal pasti ciri-ciri PKS dan faktor-faktor lain yang menyebabkan mereka tidak mahu memohon pinjaman bank. Kajian ini mengambil kira perspektif peminjam (PKS) bukan pembekal pinjaman seperti yang terdapat dalam kebanyakan kajian literatur. Sebanyak 1,425 borang soal selidik telah diedarkan kepada responden yang dipilih secara rawak dalam kalangan PKS yang berdaftar dengan SME Corporations dan meliputi kesemua empat wilayah di Semenanjung Malaysia. Jumlah soal selidik yang boleh digunakan adalah sebanyak 110 dan ini menghasilkan kadar maklum balas sebanyak 12.67 peratus. Model peminjam tak giat dalam kajian ini telah diuji dengan menggunakan analisis regresi logistik. Dapatan kajian menunjukkan bahawa saiz dan tempoh hayat PKS adalah petunjuk signifikan bagi PKS yang tak giat untuk membuat permohonan pinjaman daripada bank. Manakala jantina, pengalaman dan etnik pemilik/pengurus PKS pula adalah signifikan dengan sikap tak giat mereka. Akhir sekali, kos permohonan termasuk kos kewangan, kos manfaat dan kos psikik juga adalah penentu signifikan bagi PKS tak giat untuk memohon pinjaman bank. Dapatan kajian ini menyokong Teori Peminjam Tak Giat dan menyumbang input boleh guna kepada pihak bank atau pembekal pinjaman untuk mempertimbangkan firma-firma kecil dan ketidakjelasan dalam memasarkan perkhidmatan mereka. Di samping itu, kajian ini juga memberi pendedahan boleh guna kepada pembuat dasar dalam usaha menggalakkan pihak bank untuk menyediakan pinjaman mudah kepada PKS atau kumpulan seumpamanya.

**Kata kunci:** perusahaan kecil dan sederhana (PKS), pinjaman bank, peminjam tak giat, ciri-ciri perniagaan



## ACKNOWLEDGEMENT

I wish to express my greatest gratitude to ALLAH, the most gracious most merciful, for granting my wish of completing this PhD thesis a reality. My sincere thanks go to my lovely mother, Hajjah Fatimah Awang, my beloved husband, Alimin Mahyuddin and my children Nur Jannatul Firdaus and Abdul Muhaimin for their courage, supports and patience during my long PhD journey. Special thanks to my seven siblings for supporting me spiritually throughout writing this thesis and my life in general.

Undertaking a PhD is a lonely business, nevertheless it would not have been possible to do without guidance and support from many individuals. My very sincere gratitude goes to my supervisor Professor Dr Wan Nordin Wan Hussin for all the support and encouragement given to me. Without his guidance and constant feedback this PhD would not have been achievable. I also gratefully acknowledge the funding sources, the Public Service Department, Ministry of Higher Education, Government of Malaysia and my employer Universiti Utara Malaysia that make my PhD work possible.

I am also indebted to all my long list colleagues who I always regard as my unsung teachers and gurus in Tunku Intan Safinaz School of Accountancy (TISSA), UUM for the courage and helps in various ways throughout my long journey from the start till the end, especially in the most challenging time. Without the support from all, I could not complete what I have started.

Finally, may Allah bless all of us with his ‘maghfirah’ and grant us with ‘jannah’.

## TABLE OF CONTENTS

<b>TITLE PAGE.....</b>	<b>i</b>
<b>CERTIFICATION OF THESIS WORK .....</b>	<b>Error! Bookmark not defined.</b>
<b>CERTIFICATION OF THESIS WORK .....</b>	<b>Error! Bookmark not defined.</b>
<b>PERMISSION TO USE .....</b>	<b>iv</b>
<b>ABSTRACT .....</b>	<b>v</b>
<b>ABSTRAK.....</b>	<b>vi</b>
<b>ACKNOWLEDGEMENT .....</b>	<b>vii</b>
<b>TABLE OF CONTENTS .....</b>	<b>viii</b>
<b>LIST OF TABLES.....</b>	<b>xiii</b>
<b>LIST OF FIGURES.....</b>	<b>xiv</b>
<b>LIST OF ABBREVIATIONS.....</b>	<b>xv</b>
<b>LIST OF APPENDICES.....</b>	<b>xvi</b>
<b>CHAPTER ONE.....</b>	<b>1</b>
<b>INTRODUCTION .....</b>	<b>1</b>
1.1    Background of the Study .....	1
1.2    Problem Statement.....	9
1.3    Research Question .....	16
1.4    Research Objective .....	16
1.5    Significance of the Study.....	17
1.6    Scope and Limitation of the Study.....	21
1.7    Organization of the Thesis.....	22
1.8    Summary of the Chapter .....	23
<b>CHAPTER TWO.....</b>	<b>24</b>
<b>LITERATURE REVIEW .....</b>	<b>24</b>
2.1    Introduction.....	24
2.2    Small and Medium Enterprises (SMEs) in Malaysia.....	24
2.2.1    Definitions of SMEs .....	26
2.2.2    Government Efforts in the Development of SMEs in Malaysia .....	30
2.2.3    Financing Choice .....	35
2.3    Theory of Discouraged Borrower .....	39
2.4    Theory of Pecking Order .....	44

2.5	Determinants of Discouraged Borrowers.....	46
2.5.1	Attributes of the Business .....	46
2.5.1.1	Size of the Business .....	47
2.5.1.2	Age of the Business .....	49
2.5.1.3	Legal Form of the Business .....	50
2.5.1.4	Industry Group .....	52
2.5.2	Profile of SME Owner/Manager.....	54
2.5.2.1	Ethnicity.....	54
2.5.2.2	Educational Background.....	56
2.5.2.3	Experience .....	58
2.5.2.4	Gender.....	59
2.5.3	Quality of SME Business.....	61
2.5.4	Relationship Banking.....	67
2.5.5	Application Costs.....	71
2.5.6	Alternative Financing.....	73
2.5.7	Political Connection.....	74
2.6	Summary of the Chapter .....	84
<b>CHAPTER THREE .....</b>		<b>85</b>
<b>METHODOLOGY.....</b>		<b>85</b>
3.1	Introduction.....	85
3.2	The Overview of Philosophical Assumptions.....	86
3.2.1	Positivist Paradigm .....	87
3.2.2	Interpretive Paradigm.....	88
3.2.3	Critical Paradigm .....	88
3.2.4	Behavioral Paradigm.....	89
3.3	Hypotheses Development .....	91
3.3.1	Attributes of SMEs .....	91
3.3.1.1	Size and Age of the SMEs .....	91
3.3.1.2	Form of the Business .....	93
3.3.1.3	Industry .....	94
3.3.2	Owner/Manager Profile .....	95
3.3.2.1	Ethnicity.....	95
3.3.2.2	Educational Background.....	96
3.3.2.3	Experience .....	97

3.3.2.4	Gender.....	98
3.3.3	Quality of SME Business.....	99
3.3.3.1	Accounting Information.....	100
3.3.3.2	Innovativeness of SMEs .....	101
3.3.3.3	Collateral Availability.....	102
3.3.4	Extrinsic Values of SMEs.....	103
3.3.4.1	Relationship Banking.....	103
3.3.4.2	Application Cost .....	105
3.3.4.3	Financing Alternatives .....	106
3.3.4.4	Political Connections .....	107
3.4	Research Design .....	110
3.4.1	Operational Definition .....	110
3.4.2	Survey Instrument.....	113
3.4.3	Measurement of Variables and Coding.....	123
3.4.3.1	Attributes of SME .....	123
3.4.3.2	Owner/Manager Profile .....	124
3.4.3.3	Quality of the SME Business.....	125
3.4.3.4	Extrinsic Values of SME .....	126
3.4.3.5	Dependent Variable .....	128
3.4.4	Data Collection .....	130
3.4.5	Sampling .....	132
3.4.6	Data Collection Procedures.....	136
3.5	Techniques of Data Analysis .....	140
3.5.1	Examination of Data .....	141
3.5.1.1	Missing Data .....	141
3.5.1.2	Recoding .....	142
3.5.1.3	Response Bias .....	143
3.5.1.4	Outliers Identification .....	145
3.5.1.5	Multicollinearity .....	147
3.5.2	Testing Goodness of Data .....	150
3.5.2.1	Reliability.....	150
3.5.2.2	Validity .....	153
3.5.3	Improved Model .....	156
3.5.4	Testing the Hypotheses.....	159

3.6	Summary of the Chapter .....	159
<b>CHAPTER FOUR .....</b>		<b>161</b>
<b>RESULTS AND DISCUSSION.....</b>		<b>161</b>
4.1	Introduction.....	161
4.2	Profile of Respondents .....	161
4.2.1	Profile of SMEs .....	162
4.2.2	Profile of Owner/manager.....	163
4.3	Descriptive Analysis .....	166
4.4	Regression Analysis.....	172
4.4.1	Logistic Regression.....	172
4.5	Discussion of the Results .....	177
4.5.1	Hypothesis 1: Size of the SMEs.....	177
4.5.2	Hypothesis 2: The age of the SMEs.....	178
4.5.3	Hypothesis 3: Legal Form of the Business .....	180
4.5.4	Hypothesis 4: Type of industry .....	181
4.5.5	Hypothesis 5: The Ethnicity of the Owner/manager .....	182
4.5.6	Hypothesis 6: The educational Background of the Owner/manager ....	183
4.5.7	Hypothesis 7: The Experience of the Owner/manager .....	184
4.5.8	Hypothesis 8: The Gender Difference .....	186
4.5.9	Hypothesis 9: Accounting Information.....	187
4.5.10	Hypothesis 10: Innovativeness of the SMEs.....	188
4.5.11	Hypothesis 11: The Availability of Collateral .....	189
4.5.12	Hypothesis 12: Relationship Banking.....	190
4.5.13	Hypothesis 13: The Application Cost .....	191
4.6	Summary of the Chapter .....	195
<b>CHAPTER FIVE .....</b>		<b>196</b>
<b>CONCLUSIONS AND RECOMMENDATIONS .....</b>		<b>196</b>
5.1	Introduction.....	196
5.2	Overview of the study.....	196
5.3	Contributions .....	198
5.3.1	Methodological Contributions .....	198
5.3.2	Theoretical Contribution .....	199
5.3.3	Practical and Policy Implications.....	201
5.4	Limitations and Suggestions for Future Study.....	202

5.5	Conclusions.....	203
<b>REFERENCES .....</b>		<b>205</b>
<b>APPENDICES .....</b>		<b>221</b>



## LIST OF TABLES

Table 1.1	SME Loans Applied and Approved by Banking Institutions	12
Table 2.1	Number of Establishments and Percentage share to total Establishments	25
Table 2.2	Number of SMEs by Sector and Percentage Share to total SMEs	26
Table 2.3	Definition of Malaysian SMEs	27
Table 2.4	Assumptions applied in the Theory of Discouraged Borrowers	40
Table 2.5	Synthesis of Literature	76-83
Table 3.1	Summary of Hypotheses	109
Table 3.2	Definition of Variables in Current and Past Studies	117-122
Table 3.3	Definition of Explanatory Variables	129-130
Table 3.4	Reliability test using SPSS- Pilot	131
Table 3.5	Companies Registered with SME Corp (May 2011)	134
Table 3.6	Companies Registered with SME Corp (January 2018)	135
Table 3.7	Distribution of Respondents	138
Table 3.8	Summary of Missing Data	142
Table 3.9	Results of Chi-Square and t-tests for Response Bias between Early and Late Response Group	144
Table 3.10	Results for Independent Sample -test	145
Table 3.11	Results of Pearson Correlations	148
Table 3.12	Tolerance and VIF Values of Independent Variables	149
Table 3.13	Results of Reliability Tests on Independent Variables	151-152
Table 3.14	Cronbach's Alpha after Deleting Items	152
Table 3.15	Cronbach's Alpha: Comparing Pilot and Real Data	153
Table 3.16	Pattern Matrix for PCA with Oblimin Rotation of Five Factor Items	155
Table 3.17	Summary of Hypotheses after the Modification on the Model	158
Table 4.1	Profiles of SMEs	162
Table 4.2	Profile of Owner/managers	165
Table 4.3	Descriptive statistics – Accounting information	166
Table 4.4	Descriptive statistics - Innovativeness	167
Table 4.5	Descriptive statistics – Availability of collateral	168
Table 4.6	Descriptive statistics – Relationship with the bank	169
Table 4.7	Descriptive statistics – Application costs	170
Table 4.8	Summary of descriptive statistics – all items	171-172
Table 4.9	Logistic regression predicting likelihood of the business applying for bank loan	174
Table 4.10	Logistic regression predicting likelihood of the business applying for bank loan with robust SE	176
Table 4.11	Mean of Variable – Age of the firm	179
Table 4.12	Profiles of SME – Legal Status	188
Table 4.13	Research Question, Research Objectives, Hypotheses and Summary of the Results	193-194

## LIST OF FIGURES

Figure 1.1	Contribution of Malaysian SMEs to GDP	2
Figure 1.2	SMEs Financing Outstanding as at end of December 2015	3
Figure 1.3	Demand for Bank Loan among Respondents Who Attended the Seminar on Effective Financial Management and Access to Financing for SMEs (Penang, 2009)	14
Figure 2.1	New definition of SMEs	28
Figure 2.2	Major indicator for SMEs 2010-2020	34
Figure 2.3	SMEs Financing Outstanding as at end of 2009	36
Figure 2.4	Discouraged Borrowers and Good Applicants	43
Figure 3.1	Model of Discouraged Borrowers	111
Figure 3.2	Data Collection Process	137
Figure 3.3	Data Collection Flow	139
Figure 3.4	The Modified Model of Discouraged Borrowers	157





## LIST OF ABBREVIATIONS

BERNAMA	Malaysian National News Agency	17
BI	Banking Institutions	3
BNM	Central Bank of Malaysia	11
CGC	Credit Guarantee Corporation	15
DFI	Development Financial Institutions	3
FSB	Federation of Small Business	53
GDP	Gross domestic product	1
ICT	Information & Communication Technology	27
MARA	Majlis Amanah Rakyat	56
MGCC	Malaysian-German Chamber of Commerce and Industry	10
MIA	Malaysian Institute of Accountant	125
MoF Inc.	Minister of Finance Incorporated	28
MPC	Malaysian Productivity Corporation	189
NPL	Non-Performing Loan	32
NSDC	National SME Development Council	26
R&D	Research and Development	65
SBA	The US Small Business Administration	29
SCORE	SME Competitive Rating for Enhancement	34
SDRS	Small Debt Resolution Scheme	17
SME Corp	SME Corporation Malaysia	2
SMEs	Small and medium-sized enterprises	1
SMIDEC	Small and Medium Industries Development Corporation	17
SPM	Sijil Pelajaran Malaysia	124
SSM	Companies Commission of Malaysia	28
STPM	Sijil Tinggi Pelajaran Malaysia	124
WCGS	Working Capital Guarantee Scheme	33

## LIST OF APPENDICES

Appendix A	Questionnaires (English Version)	222
Appendix B	Questionnaires (Bahasa Malaysia Version)	230
Appendix C	Correspondence	239
Appendix D	Conference Proceedings / Publication	244



## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

Small and medium-sized enterprises (SMEs) play an important role in the economy of most countries. The Economic Census 2011 reported that, SMEs represent 97.3 percent of business establishments in Malaysia, contribute 32 percent of Malaysia's gross domestic product (GDP) and provide 57.1 percent employment (Department of Statistic Malaysia, 2012). In 2015, the SMEs contribute 33.4 percent to the GDP and 57.8 percent employment, as compared to 3.4 percent contribution to total employment by the larger firms (SME Annual Report Council, 2016). In developed countries, the contribution of SMEs to the economy is even larger. For example, the Central Statistics Office Business in Ireland Survey (2010) reported that Irish SMEs constitute 99.8 percent of enterprises, provide 69.1 percent employment and contribute 46.8 percent to the GDP (Gerlach-Kristen, O'Connell, & O'Toole, 2015). This indicates that SMEs are significant players in the economic growth and employment (job creation) in both developed and developing countries.

However, based on the current contribution of 33.4 percent to GDP, Malaysian SMEs still have a long way to go before they can match the SME contributions of 51 percent of GDP among the high income nations (Figure 1.1). Further, the targets set in the Eleventh Malaysian Plan (2016-2020) are: SMEs contribution to GDP is

expected to reach 41 percent (currently 33 percent); employment 62 percent (currently 57 percent); and export 25 percent (currently 17 percent). Therefore, it is important for Malaysian SMEs to accelerate their growth in order to meet the targets.

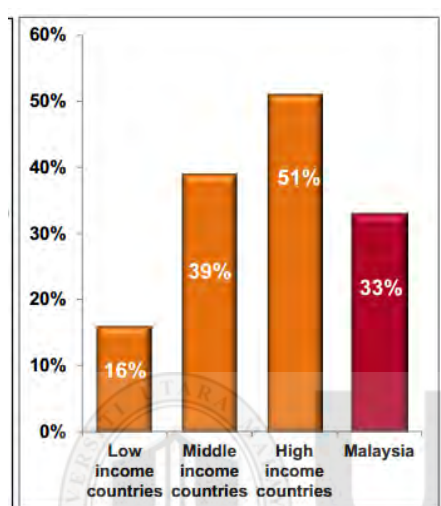


Figure 1.1  
*Contribution of Malaysian SMEs to GDP Relative to Other Countries*  
Source: SME Corporation Malaysia, 2015

In order for SMEs to attain competitive readiness to compete in the global economy, one of the main aspects to look at is the financing of their operations at various stages of the business life cycle. Financial capital is a key ingredient for innovation, growth and job creation. During the initial development and growth stages, SMEs seem to heavily rely on the banking sector in meeting their external funding requirements (Boocock & Wahab, 2001; Michaelas, Chittenden, & Poutziouris, 1999; and Nguyen & Ramachandran, 2006). SMEs also tend to shift to external financing when their internally generated funds are insufficient to finance potentially viable investment projects (Bruns & Fletcher, 2008).

As at the end of 2015, it was reported that the amount of financing by banking institutions (BI) which was outstanding to 729,983 SMEs was 91 percent (RM259.7 billion) as compared to 5 percent (RM14.8 billion) from the development financial institutions (DFIs)<sup>1</sup> and 2 percent (RM5.9 billion) from the government funds/schemes (Figure 1.2). This demonstrates that loans from banking institutions are paramount in SMEs financing.

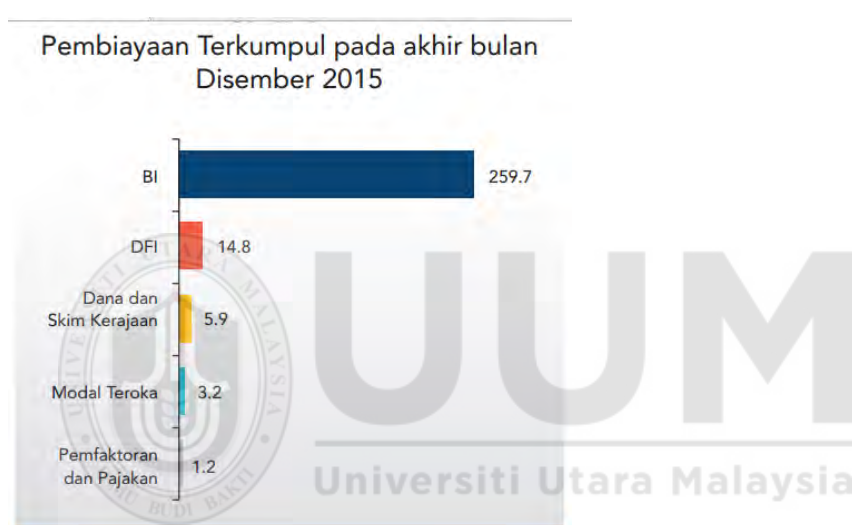


Figure 1.2

*SMEs Financing Outstanding as at end of December 2015 (RM billion)*

Source: SME Corporation Annual Report, 2015

Note: *Dana dan Skim Kerajaan* is Government Funds and Schemes; *Modal Teroka* is *Venture Capitals* and *Pemfaktoran dan Pembajakan* is *Factoring and Leasing*.

However accessing loans and other financial assistance from the financial providers remains one of the biggest challenges facing SMEs (Aziz, Awang, &

<sup>1</sup> DFIs are specialized financial institutions prescribed under Development Financial Institutions Act 2002 to develop and promote important key sectors like SMEs, infrastructure, maritime etc. Detailed explanations are provided in Chapter Two (page 32-33)

Zaiton, 2012; and Saleh & Ndubisi, 2006), coupled with the lack of capital (Hassan, Susan, Jian, & Mohd Rom, 2010).

A frequently cited factor for the difficulty in accessing external loans and other financial assistance among SMEs around the globe is information asymmetries. Information asymmetry is a situation where there are two parties involved in the same event or business transaction, and one party owns the information and the other party does not. In the bank debt financing context, the information asymmetries between financier and borrower can result in misallocation of credit (hostile selection) and possibility of misuse of funds or moral hazard. The financier or banks minimize the risk of adverse selection and moral hazard by credit rationing (Freel, Carter, Tagg, & Mason, 2012; and Mac an Bhaird, Vidal, & Lucey, 2016).

SMEs in Malaysia often complained about their lack of access to the supply of credit was due to information opacity arising from them not having proper records on financial performance as required by the banks (Ahsan, 2009). Among the other obstacles faced by Malaysian SMEs in assessing bank loans are limited collaterals, lack of track records, stringent requirements for loan approvals, high financing costs and short credit histories , especially for start-up enterprises (Mohd. Zamri, 2016).

Historically, small firms faced significant difficulties in obtaining loan for creditworthy activities due to a lack of credible information on their projects (Berger & Udell, 2007) and insufficient documentation to support the loan applications (Hassan et al., 2010) since small firms are often not required to publish their financial statements to the public. SMEs that demand for smaller amount of loans also incur higher transaction costs and face higher premiums because they are naturally more opaque and have fewer collateral to offer to the potential lender (Beck & Demirguc-Kunt, 2006; and Hassan et al., 2010). This lack of information regarding the financial positions and performance of SMEs is a concern for lenders and influences their lending decisions as they cannot observe important information and the actual ability of their clients in handling prospective contracts or projects.

As a result of the credit rationing from loan refusals due to information asymmetries arising from lack of reliable information about the default risk, SMEs are forced to cut cost, practice better cash management and postpone their investments, which limit their growth and development (Ardic, Mylenko, & Saltane, 2012). According to ACCA Global Economic Conditions Survey in 2009, 38 percent of SMEs that provide accounting services had seen a decrease in the availability of capital without a corresponding decrease in the number of profitable investment opportunities (The Economist Intelligence Unit, 2009). There are ample studies that examine the credit availability and factors associated with loan rejections in the SME literature, following the pioneering study by Stiglitz and Weiss (1981). However, an under-researched area which may impose a significant obstacle to SME investment and restrict their ambitions is the decision by the

SMEs not to apply for bank debt due to the fear of refusal (Cavalluzzo & Wolken, 2005; Freel et al., 2012; Levenson & Willard, 2000; and Mac an Bhaird et al., 2016).

Kon and Storey (2003, p. 47) predefined a 'Discouraged Borrower' as "a good firm, requiring finance, that chooses not to apply to the bank because it feels its application will be rejected". Later, Chakravarty and Xiang (2013, p. 67) defined discouraged borrower as firms with a need for a loan who nevertheless choose not to apply for a bank loan because the loan procedure was too complicated; interest rates were too high; collateral requirement were too high; and there was corruption in allocation of debt facilities.

This phenomenon indicates that there is a self-imposed financing constraint among discouraged borrowers who are reluctant to apply for debt although they have good credit prospects, which lead to suboptimal levels of investments. The decision not to apply for loan is mostly based on the perception that their applications will be denied for certain reasons, such as limited collateral and information opacity. Levenson and Willard (2000) and Freel et al. (2012) observed that twice as many businesses were discouraged from applying for loans as were denied. Similarly, Cole and Sokolyk (2016) reported that discouraged borrowers outnumber rejected loan applicants by more than two to one.



A 2005 survey by the Department of Statistics, Malaysia, shows that only 13.7 percent of SMEs chose to get financing from financial institutions and government loans, whereas the majority of them preferred to finance their operation from their own contributions and loans from family and friends (Aris, 2006). A recent research carried out by SME Corporation Malaysia (SME Corp) found that only 36.3 percent of respondents applied for new or additional loans in the first quarter of 2016 as compared to 38.6 percent in the first quarter of 2015 (SME Annual Report Council, 2016). These figures include all financial loans from banks and government agencies.

The small number of loan applications is puzzling as the World Bank ranked Malaysia as the number one country for ease of obtaining credit for six consecutive years, from 2008 (The World Bank, 2009) until 2013 (The World Bank, 2013a). To the best of the author's knowledge, this important issue of pervasiveness in borrower discouragement has not been empirically examined in Malaysia, although a few studies have been conducted to understand this phenomenon in other advanced economies such as United States (Cole & Sokolyk, 2016; Han, Fraser, & Storey, 2009; and Levenson & Willard, 2000); United Kingdom (Freel et al., 2012) Australia (Hulten, 2012; Hulten & Ahmed, 2013; Xiang, Worthington, & Higgs, 2014); China (Tang, Deng, & Moro, 2016); and the European Union (Gerlach-Kristen et al., 2015; Mac an Bhaird, 2013; Mac an Bhaird et al., 2016). While Chakravarty and Xiang (2013) examine firms that are discouraged to apply for credit in several emerging countries, excluding Malaysia.

The level of financing constraints seems to be different according to the financial development of the economy of the country. Love (2003) argues that firm's investment through its ability in obtaining external financing depends on the development of the financial market within a country. Further, the cross country variations of financing obstacles can be explained by institutional development of the countries (Beck & Demirguc-Kunt, 2006). Thus, there is a need to understand better the phenomenon of borrower discouragement in developing countries, such as Malaysia.

Recognizing the importance of financing to SMEs and the low percentage of loan applications among Malaysian SMEs, this study is carried out to provide a better understanding about the demand side of SMEs financing in Malaysia, which has been largely ignored in the past. Most of the studies on SMEs financing tend to focus on the bankers or financial providers' perspective i.e. the supply side (Aziz et al., 2012; Beck & Demirguc-Kunt, 2006; Berger & Udell, 2007; Boocock & Wahab, 2001; Firth, Lin, Liu, & Wong, 2009; Muhammad, Char, Yaso, & Hassan, 2010; and Saleh & Ndubisi, 2006). There are a few recent empirical studies that emphasis on the borrowers' viewpoint (Chakravarty & Xiang, 2013; Cole & Sokolyk, 2016; Freel et al., 2012; Gerlach-Kristen et al., 2015; Han et al., 2009a; Hulten, 2012; Hulten & Ahmed, 2013; Mac an Bhaird, 2013; and Mac an Bhaird et al., 2016), although none has investigated the incidence of and factors associated with discouraged borrowers among Malaysian SMEs.

Thus, the study is one of the first attempts to unravel the composition of discouraged borrowers among Malaysian SMEs, and the distinctive characteristics that distinguish discouraged firms from loan applicants. It is hoped that the findings from this study are useful to guide policymakers and supplier of credits on ways to encourage discouraged firms to apply for loans and address their fears of loan refusals. Besides, this study also tests Kon and Storey (2003) Theory of Discouraged Borrowers in a Malaysia setting where anecdotal evidence suggests that the demand for bank loan among SMEs is low as compared to the abundant supply of credit facilities offered by banks in Malaysia.

## **1.2 Problem Statement**

Being one of the main players in the country's economy and to optimize their contribution to the economy, it is important for SMEs to be able to operate sustainably, especially in this era of competitive global environment. SMEs must be ready to grab the great opportunities offered in the global marketplace by pursuing innovative strategies to enhance their competitive readiness.

Small firms in order to be more competitive should not only aim for survival but need to implement strategies for expansion. Scott and Bruce (1987) list five stages of small business growth. They are (1) inception stage where major sources of finance are mainly from owners, friends and relatives; (2) the survival stage where the sources of finance are from owners, suppliers and banks; (3) growth stage with financing aids from banks, new partners and retained earnings; (4) expansion stage

where more funding are needed, such as from new partners, retained earnings and long term debt; and (5) maturity stage where the main sources of finance are from retained earnings and long term debt. Therefore, external source of financing is important for SMEs in order to remain as one of the significant players in the economy.

One of the biggest challenges facing SMEs is accessing loans (Aziz et al., 2012; and Saleh & Ndubisi, 2006) and this is related to the information asymmetries (Boocock & Wahab, 2001; and Stiglitz & Weiss, 1981) and inability to provide collateral (Beck & Demircuc-Kunt, 2006). A survey by The Economist Intelligence Unit (2009) revealed that 54 percent of their respondents had seen their access to financing deteriorated over the past two years; where some loan providers preferred to hold back the cash to their existing customers and in addition there had also been an increase in the cost of debt financing.

The government of Malaysia, in its attempts to remedy the lack of financing among SMEs, has encouraged banks to provide financial assistance to SMEs. A group of six banks called “Development Financial Institutions” (DFIs) was formed for that purpose. As at end-2006, six DFIs had provided a total of RM6.9 billion to finance more than 18,000 Malaysian SMEs (MGCC, 2007). As mentioned earlier, as at the end of 2015, the banking institutions accounted for 91 percent (RM259.7 billion) of total accumulated financing to SMEs, DFIs five percent (RM14.8 billion) and government fund/schemes two percent (RM5.9 billion). Despite the amount of financial assistance offered and approved, it is felt that it is not

sufficient to finance the working capital and other business needs of the SMEs (Hassan et al., 2010).

With respect to the loan by Malaysian banks, the total loans approved to SMEs were about 3.5 percent (2006) and 21 percent (2007) of the total 520,000 SMEs (SME Annual Report Council, 2007). As for 2008, the governor of the Bank Negara Malaysia (BNM) reported that the share of SME financing from banking institutions has increased to 44 percent. At the end of 2015 the total share of loans by financial institutions (banks and DFIs) to SMEs, to total business loans has increased to 46.6 percent as compared to 43.8 percent in 2014 (SME Annual Report Council, 2016).

Table 1.1 below shows the total loan applied by SMEs to the banking institutions and approved in Malaysia for the years 2014-2017 as reported by Bank Negara Malaysia (2017). The figures in the table represent the average approval rate of 36.67 percent and therefore, the average rejection rate of 63.33 percent. The figures suggest that loan applications in 2017 dropped by RM 10 billion from RM200 billion in 2016 to RM190 billion in 2017, suggesting that SME faced some financial restrictions. Thus, it is timely to understand the factors explaining the borrower discouragement.

Table 1.1

*SME Loans Applied and Approved by Banking Institutions*

Year	2014		2015		2016		2017	
	Applied	Approved	Applied	Approved	Applied	Approved	Applied	Approved
Commercial banks	136,150.5	51,657.8	136,841.4	48,890.6	134,731.2	55,885.2	124,655.7	49,676.2
Islamic banks	43,213.2	15,240.5	48,891.5	15,733.5	46,752.9	10,141.0	52,295.8	14,669.5
Merchant or Investment banks	279.8	282.0	353.9	255.7	356.2	288.1	289.9	247.6
Development Finance Institutions	17,602.4	10,531.2	13,858.9	6,710.1	18,146.9	8,319.1	12,413.1	6,081.4
Total	197,245.9	77,711.6	199,945.7	66,140.4	199,987.2	74,633.4	189,654.5	70,674.7
Approval rate	39.09%		33.08%		37.32%		37.26%	

Source: Bank Negara Malaysia 2017

All figures are in RM million

According to the 2005 survey carried out by the Department of Statistics, Malaysia, 57.6 percent of SMEs chose to finance their business from their own contribution or internally generated funds and loans from friends and family, whereas, 13.7 percent preferred to seek financing from financial institutions and government loans (Aris, 2006). The survey also reported that the lack of collateral, insufficient loan documentation and lack of good financial track record were the main obstacles faced by the SMEs in obtaining loans. Further, according to one local bank that has witnessed a relative reduction in loan applications by SMEs, they seem to be discouraged and shy away from seeking loans or other forms of financing (The Edge, 2009a). According to the 2011 census, only 20.3 percent of SMEs sourced their finance from financial institutions as compared to 55.9 percent from internally generated fund, 14.3 percent from family and friends and 30 percent from others like grants and loan from government agencies and suppliers (SME Corporation Malaysia, 2011). This reveals that within the SMEs, the preference for bank loan is still low.

In addition, a quick survey conducted by the researcher to gain a preliminary insight on SMEs loan demand among 67 respondents who attended the Seminar on Effective Financial Management and Access to Financing for SMEs in Penang, on 3 March 2009, revealed statistics as shown in Figure 1.3. Eighteen respondents (27 percent) were found to be non-capital seekers and had no intention to apply for bank loans. Furthermore, 49 respondents (73 percent) were capital seekers and 17 (25 percent) did not want to apply for bank loan because they were looking for other sources of financing (12); fear of being rejected (4); and have no assets to offer for collateral (1). This preliminary finding indicates that borrower

discouragement in Malaysia is pervasive (i.e. 17 out of 67, or 25 percent) and slightly higher than the incidence in other countries. For example, Levenson and Willard (2000) report that 4.2 percent of US SMEs in their sample are discouraged, and Freel et al. (2012) report a 8.13 percent of discouraged borrowers in their sample of UK firms.

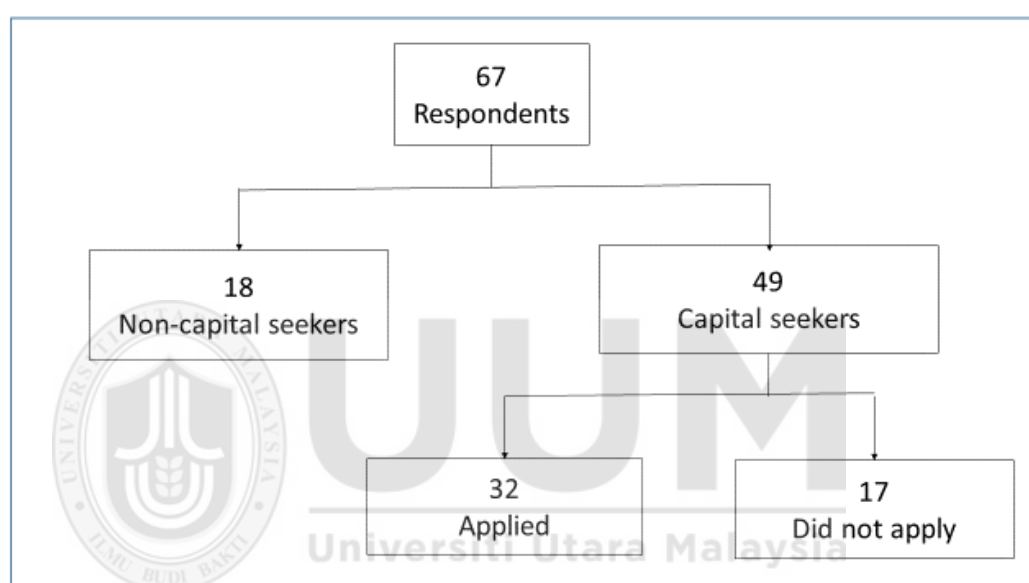


Figure 1.3  
*Demand for Bank Loan among Respondents Who Attended the Seminar on Effective Financial Management and Access to Financing for SMEs, Penang, 2009*

Despite all the obstacles in obtaining loans, as discussed above, the World Bank ranked Malaysia as the number one country for ease of obtaining credit for six consecutive years, 2008 (The World Bank, 2009) until 2013 (The World Bank, 2013b). A study by Moha Asri and Siti Khadijah (2011) concurs that SMEs in Malaysia have great accessibility to financial assistance offered by government agencies and financial institutions. This might be due to the efforts taken by the Malaysian government to ensure that SMEs have adequate access to financing, like



the recent implementation of the Microfinance Institutional framework, Credit Guarantee Corporation (CGC) and also the incorporation of SME Credit Bureau (M) Sdn Bhd. However, the increase in supply of loan guarantee funds is unlikely to remedy the SME loan problems (Cziraky, Tisma, & Pisarovic, 2005).

A study by Haron and Shanmugam (1994) identified the five Cs as basic factors to be considered by loan officers in loan approval to the SMEs in Malaysia. The five are character, capacity, capital, condition and contribution. This study, however, focused on the problems perceived by the bank officers, that is, on the supply side of the loan, rather than the demand perspective, as this study does.

Based on the previous literature and related studies, it can be concluded that the inability to fulfill the bank requirements evokes the feeling of fear of denial that may have discouraged SMEs from accessing the bank loan facilities. The lack of capital despite bundles of loans facilities available for take ups may impede the growth of SMEs, leading to them not meeting the economic agenda of the Malaysian government. Finally, good borrowers among SMEs forming the number of non-applicants may lead to opportunity loss to the banks.

Thus, there is a need for the profiling of the discouraged borrowers among Malaysian SMEs. In light of Malaysian government efforts in creating a better financial landscape for SMEs, it is timely to shed light on the possible causes of borrower discouragement in Malaysia.

### **1.3 Research Question**

This study looks at the above issues by posing the following primary research questions:

“Why Malaysian SMEs are discouraged from applying for bank loans?”

The above research question leads to secondary research questions that include:

1. What are the characteristics of SMEs and their owners that discourage them from applying for bank loan facilities? and
2. What are the external factors that can explain why SMEs do not apply for bank loan facilities?

### **1.4 Research Objective**

The following research objectives are generated as a way of addressing the above research questions:

1. To identify the characteristics of firms and their owners that refrain themselves from applying for bank loan facilities.
2. To examine the relationship between the following factors and borrower discouragement:
  - a. Quality of Business;
  - b. Relationship Banking;
  - c. Application Costs;

- d. Financing Alternatives; and
- e. Political Connections.

### **1.5 Significance of the Study**

This research study is motivated by two observations. First, Malaysia is ranked as the first country in the world for ease of getting credit for six consecutive years, from 2008 to 2013. This is supported by the efforts of the government of Malaysia in providing more avenues for SMEs to access bank loans, including the establishment of DFIs, SME Credit Bureau as well as Small Debt Resolution Scheme (SDRS) through its agencies like Small and Medium Development Corporation (SMIDEC) now known as the SME Corp, and also the Central Bank of Malaysia.

Second, despite all the efforts by the government, the total approved loans by DFIs in 2006 and 2007 was about 18,000 (MGCC, 2007) and 109,000 (BERNAMA, 2008) SMEs respectively. These figures are very low compared to the number of SMEs reported in 2005. As for the choice of financing between debt and equity financing, studies by Boocock and Mohd Sharif (2005) and Ismail and Razak (2003) found that Malaysian SMEs prefer to choose debt financing.

However, another survey carried out by the Department of Statistics, Malaysia in 2005 shows that 13 percent of SMEs preferred to go for outside financing

compared to 57.6 percent that chose to finance their business from their own contribution or internally generated funds and loans from friends and family (Aris, 2006). In addition, the same survey carried out in 2011 revealed that only 20.3 percent of SMEs sourced their finance from financial institutions as compared to 55.9 percent from internally generated fund, 14.3 percent from family and friends and 30 percent from others like grants and loan from government agencies and suppliers (SME Corporation Malaysia, 2011).

The above observations reflect the good supply of loan by banks in Malaysian environment or financial landscape driven by implementations of policies and programs by the government. However, a low number of demands among SMEs lead to questions that need to be clarified. Most studies carried out in Malaysia that are related to SMEs are more towards information technology such as e-commerce (Noroozi, Mobarekeh, & Zadeh, 2010), ERP System (Shahawai & Idrus, 2010), supply-chain management (Wooi & Zailani, 2010), and technology-transfer and Internet adoption (Alam, 2009). Others include business strategy and performance (Hashim & Zakaria, 2010; and Saad, Ghani, & Ahmad, 2014), internationalization (Hashim, Ahmad, & Zakaria, 2010), total quality management (Abdullah, 2010; and Zadry & Yusof, 2006), corporate governance (Fatt, Khin, & Yap, 2010) and Rachagan and Satkunasingam (2009) on knowledge management and transfer, environmental management as well as job satisfaction among SME employees. Too little consideration has been given to the financing of SMEs, especially from the demand side.

This study empirically examined the factors that contribute to the reluctance of SMEs in getting loans from banks and other lenders. It is significant in several aspects:

1. Theoretical contribution

The research relating to the financing of SMEs to date has tended to focus on the supply side rather than the demand as is the intention of this study. This study attempts to fill the theoretical gap in which studies by previous researchers that characterized firms or SMEs that made a loan application and were rejected by banks. This study applies the same method and variable but with a different outcome of the study, that is, the factors that are related to the non-application for bank loan among SMEs.

The few studies that look at the non-applicants (e.g. (Firth et al., 2009; Han et al., 2009; and Storey, 2004) that used binary data, which is limited in terms of statistical analysis, whereas this study adopts a different way to obtain richer information by applying a categorical scale that consists of four options from respondents in measuring the internal and external values of the business, as well as the binary and categorical responses for complete information.

Finally, this study is also assessing whether the Theory of Discouraged Borrowers and Pecking Order Theory can be tested in the Malaysian context where anecdotal and empirical evidence shows that there are obstacles in accessing bank loans among Malaysian SMEs, whereas the report by the World Bank ranks Malaysia as the easiest country for

accessing bank loans. This study tests the new variable ie. Application costs as discussed in the Theory of Discouraged Borrowers that includes financial, in-kind and psychic costs which has not been tested in details in previous studies. Thus, this study is believed to enhance the body of knowledge relating to the theory as an addition to the findings by previous studies that have already tested the theory in the United Kingdom, the United States, China and various European Countries.

## 2. Implications for policymakers

It is hoped that the findings of this study help the regulators, such as BNM and other regulating bodies, in deliberating policies that suit the needs of the Malaysian SMEs. More educational programs and financial presentation guidelines might be considered necessary thus strengthen the economies of the enterprises and the country as a whole.

## 3. Implications to academic and business practices

This study uses a different approach, thus, enabling a different explanation as an addition to the previous studies (e.g.: Han et al., 2009a; and Kon & Storey, 2003). The result of this study is believed to provide valuable insights and facilitate a better understanding concerning the need, affordability and values among SMEs, as potential customers of banks and other financial institutions. This may enable the SMEs to value themselves and make corrective measures in order to actively undertake the great number of supplies of financing by banks.

## **1.6 Scope and Limitation of the Study**

This study is confined to examining the internal and external factors that influence the decision among owner/manager of Malaysian SMEs in whether to apply for bank loan or not to apply. This study looks at the user or borrower perspective instead of lenders' where most of the factors are related to the rejection of the loan application.

This study only focuses on the SMEs in West Malaysia, covering all four regions, northern, central, southern and east coast regions. This study excludes SMEs from Sabah and Sarawak due to different geographical state of affairs. SMEs related to Mining & Quarrying, Constructions and Primary Agriculture sectors are also excluded from this study as the numbers of SMEs in such industries are not significant (0.21 percent; 8.89 percent; and 1.75 percent respectively) as compared to other industry like manufacturing (36.44 percent), trading and services (40.59 percent) that included in this study. Further, SMEs from the entire population that needed additional capital are regarded as the sampling frame in this study.

One set of questionnaires in two language versions, Bahasa Malaysia and English were sent by mail or by hand to 1,425 SMEs in all the four regions. Out of the total 162 responses, this study only based on 110 valid responses due to the categorization of capital seekers and non-capital seeker.

## **1.7 Organization of the Thesis**

This thesis consists of five chapters. The summary of the chapters is outlined below:

- Chapter One presents the introduction to the research.
- Chapter Two discusses the literature review that explains the main theory applied in this study, the review of literatures on the company and owner/manager attributes and other factors related to the behavior towards application for bank loan.
- Chapter Three presents the research methodology applied in this present study that includes mailed survey method, development of instrument, sampling, data preparation and analysis.
- Chapter Four explains the findings on descriptive statistics and regression analysis. This chapter also includes the discussion and explanation of result of this study.
- Chapter Five draws conclusions about the result of the study. The contribution and limitation of the study are also discussed in this chapter.

References in this study are presented based on American Psychological Association (APA) style of referencing.



## **1.8 Summary of the Chapter**

This chapter lays the foundation of the report. It introduces the research background, questions, objectives and the significance of the study and also the scope and limitation of this study. The final section in this chapter outlines the structure of this thesis. Next chapter discusses the review of literature and theoretical framework of the present study.



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

Chapter One outlines the anecdotal and empirical evidence on the supply of bank loan and the incidence of discouraged borrowers among Malaysian SMEs due to loan denials to SMEs. It also discusses the importance of SMEs in the Malaysian economy and global marketplace. The following sections in this chapter discuss the definition of SMEs in Malaysia and elsewhere, and also the development and financing of SMEs in Malaysia plus the efforts and measures implemented by the Malaysian government in offering a better financial landscape for SMEs. The remainder of the chapter discusses the Theory of Discouraged Borrowers, Pecking Order Theory and reviews the literatures related to the incidence of borrower discouragement.

#### **2.2 Small and Medium Enterprises (SMEs) in Malaysia**

As shown in Table 2.1, according to the Malaysian Census on Establishments and Enterprise 2005, there is a total of 552,804 companies in operation, of which 99.2 percent or a total of 548,267 is classified as SMEs. The number of SMEs in 2010 has increased to 645,136 representing 97.3 percent of total establishments. In the year 2015, the number of SMEs increased further, reaching 907,065.

Table 2.1

*Number of Establishments and Percentage Share to Total Establishments*

	2005 Census			2011 Census			2016 Census		
	Reference year 2005			Reference year 2010			Reference year 2015		
	SMEs	Large Firms	Total	SMEs	Large Firms	Total	SMEs	Large Firms	Total
Number of establishments	548,267	4,537	552,804	645,136	17,803	662,939	907,065	13,559	920,624
Percentage share to total establishments	99.2%	0.8%	100%	97.3%	2.7%	100%	98.5%	1.5%	100%

Source: Census of Establishments and Enterprises 2005 and Economic Census 2011, 2017 Department of Statistics, Malaysia

Further, Table 2.2 indicates that SMEs are classified into three main sectors (in 2005 census), namely (1) services sector (86.6 percent or 474,706), (2) manufacturing sector (7.2 percent or 39,336); and (3) agriculture sector (6.2 percent or 34,225) (SME Corporation Malaysia, 2011). Table 2.2 also shows that the Census on Establishments and Enterprise 2011 witnessed an increase in the number of SMEs in the service sector as compared to other sectors; (1) services sector (89.4 percent or 576,751), (2) manufacturing sector (6.0 percent or 38,708); (3) construction sector (3.3 percent or 21,289) (4) agriculture sector (1.2 percent or 7,743); (5) and mining and quarrying (0.1 percent or 645) (SME Corporation Malaysia, 2011). SMEs remain concentrated in the service sector in 2015, accounting for 89.2 percent (809,126) SMEs of total establishments. This is followed by 5.3% of SMEs (47,698) are involved in the manufacturing sector, 4.3% (39,158) in the construction sector, 1.1% (10,218) in the agriculture sector with the remaining 0.1% (865) in the mining & quarrying sector (Department of Statistic Malaysia, 2017).

Table 2.2

*Number of SMEs by Sector and Percentage Share to Total SMEs*

	2005 Census		2011 Census		2016 Census	
	Reference year 2005		Reference year 2010		Reference year 2015	
	Total SMEs	% to Total SMEs	Total SMEs	% to Total SMEs	Total SMEs	% to Total SMEs
Services	474,706	86.6	576,751	89.4	809,126	89.2
Manufacturing	39,336	7.2	38,708	6.0	47,698	5.3
Construction	No info		21,289	3.3	39,158	4.3
Agriculture	34,225	6.2	7,743	1.2	10,218	1.1
Mining & Quarrying	No info		645	.1	865	.1
Number of Establishments	548,267	100	645,136	100	907,065	100

**Source:** Census of Establishments and Enterprises 2005 and Economic Census 2011, 2017 Department of Statistics, Malaysia

Since SMEs represent over 97 percent of total business establishments, understanding the nature and needs of SMEs are crucial to the nation as well as the government. The Malaysian government has been promoting and providing conducive business environment and financial landscape for the growth of the SMEs. Various agencies were formed and incentives announced to increase SMEs competitiveness locally and globally as this can boost the economy of the country.

### 2.2.1 Definitions of SMEs

The Secretariat of National SME Development Council (NSDC) Malaysia on 13 September 2005 has released the common definition for SMEs to be applied by all government ministries and agencies involved in the development of SMEs. The definition also applied to the financial providers in Malaysia. Generally, SME are

defined in two broad categories, which are (1) primary agriculture and service sector including information & communication technology (ICT), and (2) manufacturing including agro-based and other manufacturing related services.

*“Small and medium enterprises in the services, primary agriculture and ICT sectors are enterprises with full-time employees not exceeding 50 or annual sales turnover not exceeding RM5 million. Whereas, Small and medium enterprises in manufacturing, manufacturing related services and agro-based industries are enterprises with full-time employees not exceeding 150 or annual sales turnover not exceeding RM25 million.”*

Source: [www.smecorp.gov.my/mode/33](http://www.smecorp.gov.my/mode/33)

Table 2.3 below summarizes the Malaysian SME definitions:

Table 2.3

*Definition of Malaysian SMEs*

	<b>Primary Agriculture &amp; Service Sector (including ICT)</b>	<b>Manufacturing (including Agro-based) and MRS</b>
Micro	<i>Employees: Less than 5; Annual sales turnover: Less than RM200,000</i>	<i>Employees: Less than 5; Annual sales turnover: Less than RM250,000</i>
Small	<i>Employees: Between 5 &amp; 19; Annual sales turnover: Between RM200,000 and less than RM1 million.</i>	<i>Employees: Between 5 &amp; 50; Annual sales turnover: Between RM250,000 and less than RM10 million.</i>
Medium	<i>Employees: Between 20 &amp; 50 Annual sales turnover: Between RM1 million to RM5 million.</i>	<i>Employees: Between 51 &amp; 150 Annual sales turnover: Between RM10 million to RM25 million.</i>

Source: ([www.smecorp.gov.my/mode/33](http://www.smecorp.gov.my/mode/33)).

However, the definition of SMEs was revised effective from 1 January 2014 to reflect the current business and economic environment. Under the new definition, all SMEs must be entities registered with Companies Commission of Malaysia (SSM) or other equivalent bodies. It however, excludes:

- Entities that are public-listed on the main board; and
- Subsidiaries of:
  - Publicly-listed companies on the main board;
  - Multinational corporations (MNCs);
  - Government-linked companies (GLCs);
  - Minister of Finance Incorporated Companies (MoF Inc.); and
  - State-owned enterprises.

Consequently, the share of SMEs to total establishment in Malaysia has changed from 97.3 percent to 98.5 percent (Economic Planning Unit, 2015).

The following figure shows the summary of the new definition of SMEs:

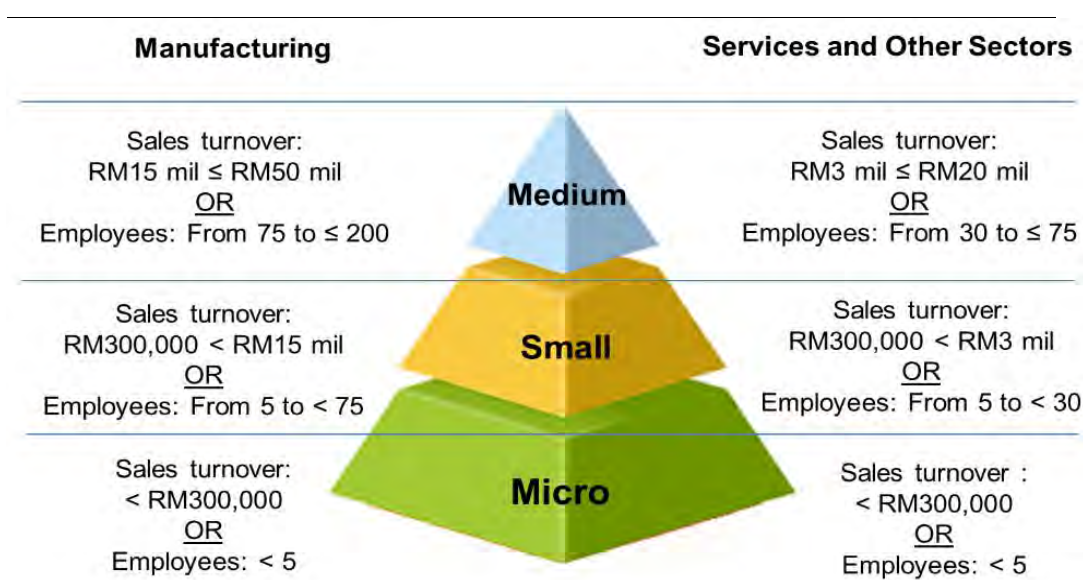


Figure 2.1  
*New definition of SMEs*  
 Source: Eleventh Malaysia Plan Book

In addition, SMEs in Europe are defined as:

*“A medium-sized enterprise is defined as an enterprise which employs fewer than 250 persons and whose annual turnover does not exceed EUR 50 million or whose annual balance-sheet total does not exceed EUR 43 million. A small enterprise is defined as an enterprise which employs fewer than 50 persons and whose annual turnover and/or annual balance sheet total does not exceed EUR 10 million. Whereas, a microenterprise is defined as an enterprise which employs fewer than 10 persons and whose annual turnover and/or annual balance sheet total does not exceed EUR 2 million.”*

*Source: Official Journal of European Union, 2003*

In the United States of America, the U.S. Small Business Administration (SBA) set size standards for each individual coded industry, which were intended to better reflect industry differences. With effect from 22 August 2008, the most common standards are:

*“500 employees for most manufacturing and mining industries, 100 employees for wholesale trade industries; \$6.5 million of annual receipts for most retail and service industries; \$32.0 million of annual receipts for most general and heavy construction industries; \$12.5 million of receipts for all special trade contractors; and \$0.75 million of receipts for most agriculture industries.”*

*Source: SBA Table of Small Business Standards, 2008*

Generally, most of the countries refer to the number of employees and annual turnover as the measurement of the size of the business.

### **2.2.2 Government Efforts in the Development of SMEs in Malaysia**

According to Economic Census 2011, SMEs represent 97.3 percent of business establishments in Malaysia, contribute 32 percent of Malaysia's GDP and provide 57.1 percent employment (Department of Statistic Malaysia, 2012). In 2015, the SMEs contribute 33.4 percent to the GDP and 57.8 percent employment, as compared to 3.4 percent contribution to total employment by the larger firms (SME Annual Report Council, 2016).

Realising the contribution of SMEs to the economy of the nation, the Malaysian government in its effort to boost the development of SMEs, formed the NSDC in June 2004 (MGCC, 2007). The NSDC spearheads the development of SMEs in Malaysia, and is chaired by the Prime Minister, with representatives from 18 key ministries and agencies. BNM is the secretariat of the NSDC. The NSDC also serves as the highest policymaking body to set the strategic direction for the government policies on SME development so as to ensure the coordination and effectiveness of government programs. As a result of the better coordinated efforts, for six years (2004-2009), the value added growth of SMEs has averaged 6.3 percent per annum, which has outperformed the overall GDP growth of 4.5 percent per annum (SME Corporation Malaysia, 2011).



One of the strategic efforts of the NSDC is to enhance the access to financing by SMEs, which included the establishment of the SME Bank in October 2005, the transformation of CGC and the formulation of the comprehensive microfinance institutional framework in August 2006 (MGCC, 2007). To further increase the avenues for SMEs to obtain financing, the government of Malaysia established the SME Credit Bureau Malaysia Sdn Bhd, on 1 July 2008. The SME Credit Bureau plays the role of a source of credible and reliable credit information for both SMEs as well as potential financiers. The comprehensive information includes credit reports, credit ratings, monitoring services and SME and industry reports. SMEs that have no financial relationship with banks, but with a strong credit standing among their trade creditors and suppliers, generally receive favourable ratings that can be used to support financing applications when the need arises (Mohd. Zamri, 2016).

Starting from 2 January 2009, the Secretariat function of the NSDC was handed over from BNM to SMIDEC, which was subsequently transformed to SME Corp. Upon the handing over, the SME Corp continues to undertake the overall coordination of SME policy formulation and assessment of the performance of SME development programs across all sectors (BERNAMA, 2008).

In addition, to bolster the government's efforts to enhance SMEs' access to financing, in May 2003, the BNM extended its role of providing information concerning the various sources of financing available to SMEs by introducing the SDRS. This is to facilitate SMEs with financial problems to restructure their debts. As at February 2008, a total of RM502 million from 740 applications were received

by the BNM for restructuring purposes. From that, 570 applications to restructure non-performing loans (NPL) were approved totaling RM329 million.

Due to the huge contribution of SMEs to the economy of the nation and realizing that one of the problems facing SMEs is inadequate finance and lack of access to commercial bank credit, the government of Malaysia formed a group of banks called DFIs, namely, SME Bank, EXIM Bank, Bank Simpanan Nasional, Bank Kerjasama Rakyat Malaysia Berhad, Bank Pembangunan Malaysia Berhad and Bank Pertanian Malaysia that provide financial assistance to the SMEs.

As at end 2006, the six DFIs had approved a total of RM6.9 billion of business loans to more than 18,000 SMEs (MGCC, 2007). In 2007, the Malaysian banking institutions had approved a total of RM55 billion in new financing to more than 109,000 SMEs, and for the first five months of 2008, a total of RM22.7 billion in new financing was approved to more than 55,800 SMEs (BERNAMA, 2008).

However, the sources of financing from banks among Malaysian SMEs are fairly low as reported in the Economic Census 2011 that 57.6 percent of SMEs financed their businesses from internally generated funds, almost similar to the figure of 55.9 percent in 2005 census (Aris, 2006; and SME Corporation Malaysia, 2011). In total, a small number of SMEs, 13.7 percent in 2005 census and 20.3 percent in 2011 census, able to source their funds from financial institutions including commercial banks, micro-credit organization and DFIs (Aris, 2006; and SME Corporation Malaysia, 2011).

The Malaysian government has taken a comprehensive approach by providing stimulus measures that focus on enhancing the access to financing for SMEs. The Ninth Malaysia Plan (2006 - 2010) announced a total of RM463 million financial assistance to SMEs, in addition to the DFIs continuing to complement banking institutions in providing finance, focusing on developing competitive and globally-oriented SMEs. The Malaysian government has been supporting the development and financing of SMEs for a long time. In the Sixth and Seventh Malaysia Plan, the government allocated RM133.8 million and RM500 million, respectively. In addition, in the Eighth Malaysia Plan, the SMIDEC alone had allocated a total of RM221.4 million for development programs among SMEs (Hashim & Zakaria, 2010).

In the Tenth Malaysia Plan (2016 - 2020), the government reintroduced the Working Capital Guarantee Scheme (WCGS) with an additional allocation of RM3 billion, effective from January 2011. This is an extension to the RM7 billion introduced under the stimulus package in 2008 to assist SMEs during the economic downturn. In addition, the credit guarantee by the CGC was also introduced to assist SMEs without or with minimal collateral and no track record to obtain loans from banks. As at end of 2009, the CGC reported an accumulated guarantee of more than 402,000 loans valued at RM45 billion (SME Annual Report Council, 2009).

Among other measures put in place in the Tenth Malaysia Plan, financial institutions were encouraged to apply the SME Competitive Rating for Enhancement (SCORE) as a complimentary tool in assessing the creditworthiness

of applicants among SMEs. SCORE, which is a diagnostic tool in rating the competitiveness of individual SMEs based on performance and capabilities, was launched in December 2009. SMEs will be rated as one to five stars, with the measures based on parameters like business performance, financial, management, production and product capabilities as well as quality systems and innovation (Economic Planning Unit, 2010).

Item	2010	2015	2020	Tenth Plan	Eleventh Plan
				Achieved	Target
<b>Contribution of SMEs to GDP</b> (RM billion in 2010 prices)	262.9	371.9	578.6	1,605.8	2,420.8
<b>Annual growth rate (%)</b>	8.3	9.3	9.3	7.5	9.3
<b>Share to GDP (%)</b>	32.0	35.0	41.0	33.4	38.4
<b>SMEs exports</b> (RM billion in 2010 prices)	100.3	147.8	243.7	634.0	995.0
<b>Share to total exports (%)</b>	15.7	19.0	25.0	17.3	22.4
<b>Share to total employment (%)</b>	57.1	59.0	62.0	57.8	60.7

Note: 2015 numbers are estimated; 2020 numbers are forecasted  
Source: Economic Planning Unit; Department of Statistics Malaysia; and SME Corporation Malaysia

Figure 2.2  
*Major indicator for SMEs 2010-2020*  
Source: Eleventh Malaysia plan 2016-2020

Figure 2.2 above shows the major contributions of SMEs as reported in Eleventh Malaysia Plan. SMEs contributed RM262.9 billion to GDP in 2010 (32.0 percent) and share to total employment of 57.1 percent. During the Tenth Malaysia Plan, the SMEs contributed 33.4 percent to the GDP (RM1,605.8 billion) and 57.8 percent to the total employment. It is targeted for the next Eleventh Malaysia Plan to achieve RM2,420.8 billion contributions to GDP and 60.7 share to employment (Economic Planning Unit, 2015). In 2015 SMEs contributed 36.3 percent to GDP

and share to total employment of 65.5 percent (SME Annual Report Council, 2016).

The Eleventh Malaysia Plan focuses on developing resilient and sustainable SMEs to achieve inclusive and balanced growth. Among the strategies is to enhance the ease of doing business. SMEs are encouraged to appoint industry experts during their preparation of proposal especially for technology and innovation activities. Further, the SME Investment Partner (SIP) program is also expected to introduce new ways of financing for early stage companies by combining equity and loan financing features and providing up to 100 percent margin of financing (Economic Planning Unit, 2015).

SMEs in Malaysia have increasingly played an important role in realizing the mission and vision of the Malaysian Government to become a high-income and knowledge based nation. With the measures and programs offered by the government through its agencies, Malaysian SMEs might be able to minimize the impact of the global crisis and succeed in their journey and help the government in meeting certain objectives, thereby making Malaysia a high-income nation as envisioned in the New Economic Model.

### **2.2.3 Financing Choice**

Financing projects or operations is the most crucial part among SMEs. This is due to the limited resources of financing as compared to listed companies. Companies

may choose between debt financing and equity financing. Studies by Boocock and Mohd Sharif (2005) and Ismail and Razak (2003) revealed that Malaysian SMEs prefer to choose debt financing rather than equity financing to set up and expand their businesses.

Malaysian government in its effort to minimize the impact of global financial crisis on local SMEs has implemented various stimulus measures especially in enhancing access to financing. Besides, Malaysian financial landscape also comprises of banking institutions, DFIs, venture capital companies as well as leasing and factoring companies. This diversification of financing avenues provides many choices to the SMEs and enables them to sustain and grow.

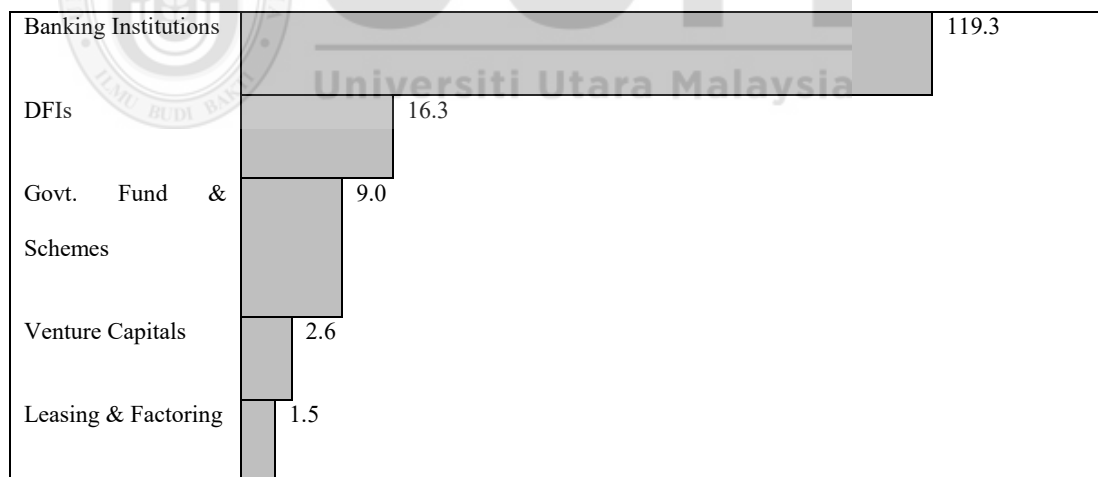


Figure 2.3  
*SME Financing Outstanding as at end of 2009 (RM billion)*  
 Source: SME Corporation Annual Report 2009/10

Figure 2.3 above shows that banking institutions is the main source of financing among SMEs as at end of 2009, representing 80 percent of total financing extended by the various financiers. This shows a huge contribution by SMEs to the bank

loan offered by the banking institutions. In addition, the approval rates for the previous four years (2006 - 2009) have been above 60 percent. This is in line with the World Bank ranked Malaysia as the number one country for ease of obtaining credit for six consecutive years, from 2008 (The World Bank, 2009) until 2013 (The World Bank, 2013a).

However, an anomaly exists as empirical and anecdotal evidence show that not many Malaysian SMEs prefer to seek bank loans (Aris, 2006). Various factors have been identified in relation to the difficulties in getting access to bank (Haron & Shanmugam, 1994; Hassan et al., 2010; Saleh & Ndubisi, 2006; and Sheng et al., 2010). As an example, one local bank has witnessed a relative reduction in loan applications (The Edge, 2009b).

According to the survey carried out by the Department of Statistics, Malaysia, 57.6 percent of Malaysian SMEs chose to finance their business from their own contribution or internally generated funds and loans from friends and family, whereas, 13.7 percent preferred to apply for financing from finance institutions and government loans (Aris, 2006).

The lower number of SMEs taking up financing from finance institutions might be due to various reasons. The constrained credit supply is one of the main reasons and major challenges to the SMEs, not only in Malaysia, as it is a worldwide phenomenon that hinders their growth and development (Saleh & Ndubisi, 2006).

The perceptions related to the opacity or the information asymmetry among financial providers toward SMEs seems to contribute to the problems in obtaining loans. Sheng et al. (2010) explained five categories that have an impact on the loan approval decisions by bank officers which include the personality of the loan applicant (SMEs), as perceived by the bank officer. Lacking in accounting knowledge, incomplete information, limited sources of income, insufficient personal financial contribution and sole runner of the business are the most common problems faced by bank officers in dealing with loan applications by SME owners (Haron & Shanmugam, 1994).

Furthermore, according to Aris (2006), factors that represent the most significant problems facing the SMEs in accessing loans are lacking in collateral (55.2 percent), insufficient documents to support application (13.1 percent) and no financial track record (10.7 percent). This is agreed by Mohd. Zamri (2016) that inability in providing, lack of track records, incomplete business information, stringent in loan approval, high interest rates and new in operation are among obstacles that faced by Malaysian SMEs in their effort of getting credit. The non-compulsory audited financial statements among SMEs also contribute to the lack of information and credibility of the SMEs. Thus, leading to lacking in transparency in their business disclosures (Saleh & Ndubisi, 2006). The non-transparency and uncertainty in information also results in bankers or fund providers having difficulty in their decision making as they are not sure of the credibility of the prospective customers.



Apart from the efforts by the Malaysian Government to provide a better financial landscape for SMEs, there are significant views that signal the lack of access to finance among SMEs. This could result from the perception of SMEs that being a small company, they would not be able to obtain a bank loan.

### **2.3 Theory of Discouraged Borrower**

Considering the Malaysian financial landscape, which is referred to as SME friendly, plus the recognition by the World Bank for being the number one in the list of countries with ease of getting credit, issues such as inadequate supply of bank loan for SMEs should not exist. However, the anecdotal and empirical evidence shows another side, as discussed before. This leads to the interest in focusing on the demand side of the loan, i.e. the borrowers themselves.

A Discouraged Borrower is pre-defined as “a good borrower may not apply for a loan to a bank, because they feel that they will be rejected” (Kon & Storey, 2003). This refers to the fear companies have that their loan application will be rejected especially among small entities. Applying for a loan involves costs like documentation, consultation, travelling, communication and others. Kon and Storey (2003) incorporated two elements, the application costs for borrowers and imperfect screening by banks to pool the equilibrium between the application behavior of firms and the loan granting decisions by banks.

Table 2.4

*Assumptions Applied in the Theory of Discouraged Borrowers*

---

- A1 :* *Information Asymmetry*, where firms certainly know whether the investment will succeed or otherwise, whereas the bank does not.
- A2 :* *Homogeneity*, where good and bad firms are homogeneous in each type.
- A3 :* *Return*, where the return from investment for good firm are certain.
- A4 :* *Return* from investment is risky for bad firm.
- A5 :* *Application cost* for application for bank loan is fixed.
- A6 :* *Screening*, all firms are subject to screening upon loan application to the bank.
- A7 :* *Imperfect screening*, good company may be perceived as bad; and bad company is perceived as good.
- A8 :* *Homogeneous banks*, the same screening procedures are used by all banks with the same error ratios.
- A9 :* *Interest rate*, the rate for a bank loan is different from other money lenders.
- A10 :* *Collateral*, the use of collateral in the loan contract is ignored.

---

Note: *A1-A10: Assumption 1 – Assumption 10*

Source: Kon and Storey (2003)

This theory focuses on good borrower/firms that satisfy the condition in which their expected return is higher than the application costs. The theory introduces ten assumptions that are subsequently relaxed, in order to determine the expectations in more realistic environments. The ten assumptions are presented in Table 2.4 above.

Upon application for the loan to the bank, all firms proclaim themselves as good. Thus, this theory assumes that banks are only able to screen imperfectly. This results in good applicants being perceived as bad by banks, and vice versa. The two groups can only be distinguished by observing characteristics like age and education of owner, age of firm as well as the purpose of financing. The firms are also assumed to only apply to one bank due to the homogeneity in the bank's screening procedures.

According to the theory, the opportunity cost between return and interest rates and effective application cost are two important factors that lead to the decision by manager or owner of a good firm whether to apply for bank loan or not. A firm's return is higher when the interest rate is low, thus, the application rate is increased. It is also believed that when the application cost is zero, the return will be higher, and the screening error by banks due to lack of information does not influence the application decision by good firms. The results expected with the assumption of homogeneity of firms, as in *A2* (Assumption 2), are within four parameters below:

- Gross return: return from investment;
- Screening error: good borrower perceived as bad;
- Application cost; and
- Firm's return if funded by other moneylender.

If firms are homogeneous in the four parameters above, all good firms will act the same – all would apply, or all would not – thus, no discouragement. Hence, if *A2*

is relaxed, for example, the application cost varies among firms due to (1) the ability to prepare a loan application, and (2) the attitude toward the bank, discouragement may occur.

Figure 2.4 below shows how discouraged borrowers occur. Under perfect information all good firms  $OB$  apply for a bank loan and are successful due to effective borrowing cost  $C1$  lower than gross return. However, under imperfect information, good firms are screened with errors, thus, application costs are incurred and effective borrowing costs shift up to  $C2$ , resulting in the number of applicants falling to  $A$ . Thus, only  $OA$  numbers of good firms apply, leaving  $AB$  who is discouraged to apply due to higher effective borrowing cost compared to gross return.

In other words, assuming that in order to avoid erroneously being screened, firms need to incur higher cost to provide better and complete information. Firms with lower gross return would be discouraged from applying due to the higher application costs and lower return.

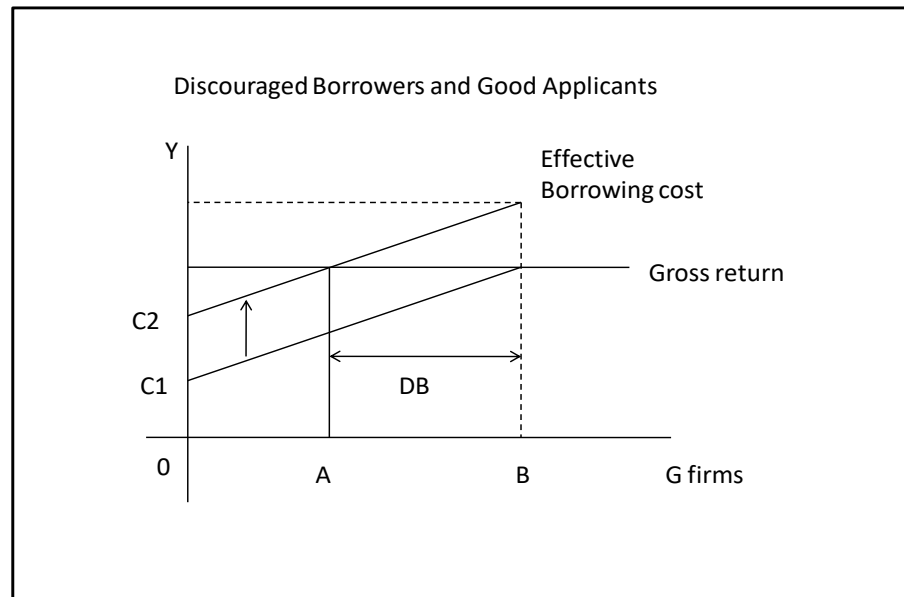


Figure 2.4  
*Discouraged Borrowers and Good Applicants*  
 Source: Kon and Storey (2003)

A discouraged borrower is then defined as “which would have chosen to receive a loan from the bank, and which the bank would have lent to, but where the business did not apply for a loan” (Kon & Storey, 2003).

This theory also outlines two keys in the characteristics of firms that may have an impact on the number of discouraged borrowers. Firms that are able to provide information accurately may reduce the screening error by the bank, thus, shifting down the  $C2$  lower which results in a decrease in the number of discouraged borrowers. However, firms that improve their ability to prepare applications for funding will decrease in application costs. Thus, lower down the  $C2$  and number of discouraged borrowers as well. In addition, the introduction of collateral by

banks and loan guarantee schemes also leads to a decrease in the number of discouraged borrowers. In summary, the screening error by banks that relate to the characteristics of firms, the scale of application cost, collateral and the existence of loan guarantee scheme have an impact on the number of discouraged borrowers in bank loan applications.

## **2.4 Theory of Pecking Order**

Pecking Order Theory is a framework established by Myers (1984) and Myers and Majluf (1984) that explains the business managers' financial preference between retained earnings, external debt and equity. According to this theory, firms in trying to reduce information asymmetries and maintain ownership, would prefer to use internal funding or retained earnings. Next, if external financing is required, debt is preferred over equity. Equity is expected to be the last choice as the theory believes that managers act in the best interest of shareholders and value the existing shareholders (Myers, 2011) by avoiding their share dilution. The theory also regards debt financing as having a lower adverse selection as compared to equity.

Initially, this theory was predominantly used to explain the financial behavior among large and publicly listed firms. The theory might not be appropriate for SMEs as managers are mainly the owner of the business and would not normally dilute their ownership claim (Holmes & Kent, 1991). The theory is found to perform much better in large firms with less severe adverse selection as compared to small firms (Frank & Goyal, 2003). This is supported by López-Gracia and

Sogorb-Mira (2008) where the SMEs and large firms display different patterns in terms of financial behavior as the SMEs owners turn their attention to debt when the internal resources have come to an end. Thus, these explain that the pecking order model is not significant to the SMEs.

Previous studies prove that this theory is also applicable to SMEs. Sanchez and Martin (2005) in their studies on 1,566 Spanish SMEs, indicates that the pecking order theory holds in all samples. According to Frid (2009), the nascent or new entrepreneurs among SMEs use personal resources first, followed by external resources and equity is the last to be taken as the owner probably has more information as compared to outsiders. Earlier, Frank and Goyal (2003) agreed that financial behavior among SMEs can be naturally described by the pecking order approach as they also affected by information asymmetries.

Study by Padachi, Howorth and Narasimhan (2012) among small Mauritian manufacturing business revealed that the external equity capital would be raised as a last resort, after the used of retained profit and followed by external debt. Thus, it can be established that the pecking order model is also applicable to the SMEs as the information asymmetries like adverse selection and moral hazard are also related and lead to more transaction cost in the course of seeking financing.

## **2.5 Determinants of Discouraged Borrowers**

Discouraged borrowers will be at a minimum with perfect information, where the screening error is at its minimum. The valuable information provided by firms that apply for bank loans reduces the screening error by the banks. This study looks at the attributes of SMEs from two perspectives, the business entity and the owner-manager characteristics.

### **2.5.1 Attributes of the Business**

One of the objectives of this study is to recognize the features of SMEs that refrain themselves from applying for bank loan facilities. The size and age of the business, legal form and industry group are among attributes of the business that are related to the behavior of SMEs towards the bank loan application (Brown, Ongena, Popov, & Yesin, 2011; Cavalluzzo, Cavalluzzo, & Wolken, 2002; Chakravarty & Xiang, 2013; Cole & Sokolyk, 2016; Fatoki & Asah, 2011; Freel et al., 2012; Han et al., 2009a; Mac an Bhaird et al., 2016; Vos, Yeh, Carter, & Tagg, 2007; and Xiang et al., 2014). This section discusses all of the above attributes.



### ***2.5.1.1 Size of the Business***

Small firms are normally owned by one owner (proprietorship) or more (partnership), have less assets and need smaller amount of financing (Freel et al., 2012). They are also known to have lack of information or be less transparent among bankers that may lead to imperfect information or information asymmetry (Han et al., 2009a) and credit rationing (Stiglitz & Weiss, 1981). The size of the firm seems to have an impact on the chances of SMEs being granted a loan by the bank, as well as the application decision by the SME itself. As the firm grow larger, they are more established and believed to be more creditworthy (Cole & Sokolyk, 2016), have better reserves (Mac an Bhaird et al., 2016) and track record, therefore the chances of their loan application being denied may be reduced.

Firms tend to use outside financing as they grow older and larger (Berger & Udell, 1998). The size of the firm is negatively related to the fear of denial, thus the larger the firm the less discouraged they are (Vos et al., 2007). This is supported by Han et al. (2009a) who showed that discouraged borrowers are younger and smaller. Among important determinants in reducing fears of denial is having larger assets and greater sales relative to assets (Cavalluzzo et al., 2002). A study by Fatoki and Asah (2011) found that loan applications among firms with more than 50 employees are more likely to be successful as compared to firms with less than 50 employees. This finding is supported by Freel et al. (2012), Levenson & Willard (2000) and Storey (2004) who concluded that the size of the business positively influences the application rate for bank loans.

Further, smaller firms in Eastern Europe are less likely to apply for bank loan (Brown et al., 2011). Similarly, Chakravarty and Xiang (2013) showed that larger firms are less likely to be discouraged from applying for bank loans. Xiang et al. (2014) also found that the larger the firm, the more likely it is to apply for outside financing. The above findings are also supported by Mac an Bhaird et al. (2016) who showed that smaller firms are more likely to be discouraged, and Cole and Sokolyk (2016) who found that larger firms are more creditworthy.

Study by Gama, Duarte and Esperança (2017) in their study on 11,800 enterprises from 29 countries in Eastern Europe and Central Asia also confirm that discouraged borrowers are smaller than loan applicants. Latest study by Gomez-Vazquez, Hernandez-Canovas and Ramon-Llorens (2018) among 837 Spanish SMEs indicate that the likelihood of SME being discouraged decreases with the size of the firm.

In contrast, a study by Vos et al. (2007) suggested that size is not the determining factor in loan application as they found that larger firms do not apply for loan more or less frequently as compared to smaller firms, even though their applications are more likely to be approved.

### ***2.5.1.2 Age of the Business***

Generally, younger firms have less networking with other financial institutions (Chakravarty & Xiang, 2013) and may resort to self-financing or financing from family and friends. Younger firms are riskier and have higher growth opportunities (Ismail & Razak, 2003), more opaque than established firms (Hyytinen & Pajarinen, 2008) and tend to borrow less than experienced firms (Berger & Udell, 1990). As the firms grow older, more financing is needed either for their expansion or to cover other operational costs. As they become more established they are perceived to be more creditworthy (Cole & Sokolyk, 2016) and have better reserves (Mac an Bhaird et al., 2016).

Han et al. (2009a) revealed that discouraged borrowers are younger and less experienced. A study by Canton, Grilo, Monteagudo and Zwan (2013) showed that youngest and smallest SMEs are plagued with bad perception and need more time to improve the track records and overcome such bad perception. Fatoki and Asah (2011) found that SMEs that are more than five years old are more successful in loan application compared to SMEs that are less than five years old.

Further, 78 percent of the surveyed Malaysian SMEs start their businesses using their own funds (Moha Asri & Siti Khadijah, 2011), which indicates that majority of the enterprises prefer internal fund instead of outside funding probably due to their adverse perception on bank loans. This is consistent with Chakravarty and Xiang (2013) who found that older firms are less likely to be discouraged, and

Mac an Bhaird et al. (2016) who showed that younger firms are more likely to be discouraged as compared to older firms that are in a better position to apply for bank loan due to established banking relationship. Older firms are perceived to be more creditworthy since they are able to survive during the high-risk start-up period and have established track record as required by the prospective lender (Cole & Sokolyk, 2016). This is later agreed by Gama et al. (2017) that the incidence of discouragement exists among younger firms in Eastern Europe and Central Asia.

However, the credit desire model by Freel et al. (2012) suggests that younger firms are more likely to go for bank loans, which is consistent with the evidence in Mina, Lahr and Hughes (2013) study, showing that age of the firm exerts a negative effect on the credit seeking behavior.

### ***2.5.1.3 Legal Form of the Business***

The owner(s) of a sole proprietorship (partnership) have unlimited liability on their businesses. The lenders in satisfying their claims, may take hold of the owner(s) personal assets as well as business assets, therefore they are believed to be more creditworthy (Cole & Sokolyk, 2016). On the other hand, firms with limited liabilities are perceived to be more credible (Freel et al., 2012) as compared to sole proprietorship due to the formal commitment by the owners. Therefore, the legal form of a business may be associated with borrower discouragement.

According to Haron and Shanmugam (1994) SMEs run by single owner are among the problems faced by bank officers in approving loans. Single ownership decreases the probability of applying for a loan (Blumberg & Letterie, 2007). Information asymmetry is greater among sole proprietor firms since they are not required to publish their financial statements. The incomplete record keeping and unaudited financial statements aggravate the information opacity problem. Besides the limited information, single ownership firms also have to provide more collateral as compared to a corporation (Machauer & Weber, 1998).

In addition, Han et al. (2009a) also found that discouraged borrowers are less likely to be incorporated. The rationale for this might be that limited liability increases the firm's credibility, hence, leading to the high application and approval rates for bank loans, compared to the unlimited liabilities among sole proprietors and partnerships. Cole and Sokolyk (2016) also observed that proprietorships and partnerships are found to be more discouraged than corporations, in seeking finance.

However, Cowling and Mitchell (2003) argued that failure of loan repayments among limited companies is higher than that for sole-traders and partnerships. This might be due to the commitment of the sole traders and partners who are legally liable for the loan repayment, as compared to the limited companies that are less committed borrowers. Freel et al. (2012) found supportive evidence that there is a positive link between limited liability and discouragement in bank loan applications. Further, study by Gama et al. (2017) argued that there is no

significant relationship between ownership concentration with the likelihood of being discouraged.

#### ***2.5.1.4 Industry Group***

Different industries have their own challenges and strengths. The service industry faces lower barriers to entry, thus are subjected to more intense competition compare to non-service sectors. The enterprises in the service sector also have more human and intellectual capital as compared to physical capital (Freel et al., 2012), thus they have less collateral to offer. On the other hand, manufacturing firms have greater financial neediness due to keener perceptions of financial constraints (Westhead & Storey, 1997), fewer exit options (Watson & Everett, 1999) and they can offer high level of fixed and tangible assets (Freel et al., 2012) as collateral.

A study by Firth et al. (2009) found that financial information provided by manufacturing firms is related positively and significantly to access to finance and the size of finance. On the other hand, they suggested that historical profitability information is less informative indicator of current and future performance for firms in the service industry.

In addition, human and intellectual capital that is more related to the service industry is intangible in nature, thus leading to the unsympathetic attitude toward

service-based firms by banks and other financial institutions (Howells, 2003). A study by Freel et al. (2012) among members of the Federation of Small Businesses (FSB) in the UK, revealed that almost 21 percent of knowledge-intensive service firms are discouraged from applying for loans, as compared to production (12.6 percent) and wholesale and retail firms (14.5 percent).

High technology small and medium enterprises are pre seen as high risk industry, thus banks in Malaysia are not willing to offer financing to such group (Ajagbe, Long, Aslan, & Ismail, 2012). Mina et al. (2013) also showed that manufacturing businesses seek finance more often due to their higher (physical) capital intensity as compared to service or other businesses. A study by Mac an Bhaird (2013) showed that construction firms are more likely to apply loans as they are able to satisfy the bank requirement on collateral.

Although industrial sector could play an important part in loan approval and application, a study by Craig, Jackson and Thomson (2007) did not find the share of loan to manufacturing SMEs to be higher in the more economically vibrant and urban market consistent with Fatoki and Asah (2011) who found that industry or line of business is not associated with the incidence of getting credit. The same findings by Cole and Sokolyk (2016) indicated that there is no significant difference between industrial sector and ease of getting credit though certain industries like manufacturing and constructions are expected to be more creditworthy due to more tangible assets owned.

## **2.5.2 Profile of SME Owner/Manager**

The background of the owner/manager of the firm also plays an important role in the loan application by the firm and approval rate by the bank. The ethnic and academic backgrounds as well as genders have previously drawn the attention of many researchers (eg. Bates & Robb, 2015; Blumberg & Letterie, 2007; Cavalluzzo et al., 2002; Chakravarty & Xiang, 2013; Cole & Sokolyk, 2016; Fraser, 2009; Freel et al., 2012; Han et al., 2009a; Hulten & Ahmed, 2013; Roper & Scott, 2009; and Vos et al., 2007).

### **2.5.2.1 Ethnicity**

Generally, the country's social cohesion and multiculturalism may be promoted by the involvement of multi ethnicity especially minority ethnic group that participated in important and visible segments like retailing and catering (Carter, Mwaura, Ram, Trehan, & Jones, 2015). This reflects the contribution of businesses owned by minority ethnics to the economy of a country. On the other hand, small businesses located among the minority neighborhoods with high poverty rate are seen to be unattractive to the lenders (Bates & Robb, 2016). This may lead to the perception among minority ethnics on the existence of the discrimination related to their financing application.



Researches in Western countries concluded that ethnic background is subject to discrimination, as studies found that access to finance is more difficult for Black people (Bates, 1991; Blanchard, Zhao, & Yinger, 2008; Blanchflower, Levine, & Zimmerman, 1998; Cavalluzzo et al., 2002; Raturi & Swami, 1999; and Storey, 2004). Further, Han et al. (2009a) found that discouraged borrowers are more likely to belong to an ethnic-minority group.

A study by Carter et al. (2015) showed that Black African (44 percent), Black Caribbean (39 percent), Bangladeshi (31 percent), Pakistani (21 percent) and Indian (9 percent) firms testified that they did not apply for loans due to fear of rejection as compared to White firms (4 percent). This phenomenon was earlier documented in the study by Cavalluzzo et al. (2002) that African American and Hispanic owners are more likely to avoid applying for loan from banks due to fear of being turned down. Further, due to perception of ethnic discrimination, Black Caribbean are more likely to report discouragement in applying for bank loan (Fraser, 2009).

Minority business loan applicants also experienced higher costs, being granted for a smaller loan or have their loan application rejected more often (Bates & Robb, 2013). In comparison with firms owned by Whites, those firms owned by Blacks, Latinos and Asians are more probable to be discouraged and being denied for credit facility by banks (Bates & Robb, 2015). Another study by Hulten and Ahmed (2013) in Australia concluded that there is no significant difference between

migrants entrepreneurs and Australian-born entrepreneurs in bank loan application discouragement.

In the Malaysian context, ethnicity is classified into indigenous or bumiputra and non-indigenous or non-bumiputra. The bumiputras have been given more attention by the government through the New Economic Policy since it was instituted in 1970, to encourage their participation in the economic and business ventures. One of the leading banks in Malaysia, has allocated a total of RM1 billion in 2014 to fund SMEs where about 50-60 percent are set aside for bumiputra applicants (The Edge, 2014). However, it is reported that between 1966 and 1990, out of RM600 million loans provided by MARA (Majlis amanah Rakyat or Council of Trust for the Indigenous or Bumiputra of Malaysia) to about 108,000 SMEs, only 10 percent of the borrowers were committed to pay back their loan (Zainol & Ayadurai, 2010). Thus, the ethnicity of the owner of the SMEs may also be linked to the attitude toward the loan application.

#### ***2.5.2.2 Educational Background***

Educational background or human capital among owner-managers of firms reflects the personality of the firm, and is likely to have an impact on the loan application and approval rates. The level of education among owners of the business may increase self-confidence (Freel et al., 2012) and at the same time form a better perception among lenders that the entrepreneurs are better equipped in successfully handling their businesses (Cole & Sokolyk, 2016).

Thus, owners with higher education are associated with reduction in loan denial and in higher loan application (Storey, 2004). Educational background of business owner is significantly negatively related to the fear of denial, thus the higher the education the less discouraged they are (Vos et al., 2007). A study by Wu, Song and Zeng (2008) in China found that SMEs having owners/managers with higher educational background are more likely to take advantage of bank financing. Han et al. (2009a) found that discouraged borrowers are less likely to have a college degree. This is supported by Fatoki and Asah (2011) that the educational background has a positive and significant relationship with the access to finance. Similarly, Chakravarty and Xiang (2013) found that firms with more educated owners are less likely to be discouraged from applying for bank loan. In addition, education level is one of the factors that influence the payment behavior among borrowers (Shaharudin, Ahmad Basri, & Mohd Isa, 2016).

In contrast, studies by Blanchflower et al. (1998), Cavalluzzo et al. (2002), Frangos, Fragkos, Sotiropoulos, Manolopoulos and Valvi (2012) and Raturi and Swami (1999) reported that education or work experience has no significant effect on the denial. Meanwhile, Blumberg and Letterie (2007) found that higher education among owners reduces the incentive for loan application.

### **2.5.2.3 Experience**

A developed experiential capital, like prior experience in managing another business is also important in building the confidence in the owner-manager of SMEs in bank loan application. The creditworthiness of the firms is deemed favorable in firms with more experienced owners (Cole & Sokolyk, 2016) due to their longer track record in the firm's line of business. Generally, the development of technical skills and practical experience is believed to mitigate the risks in running the business (Vos et al. 2007) thus it can enhance the assessment of creditworthiness among lenders. In Malaysia, one of the leading banks in 2014 has allocated RM1 billion to fund SMEs, and imposed a restriction that the applicants must have at least three years' experience in handling their businesses (The Edge, 2014).

Owner-managers with more diverse experience and resources are positively related to loan application, as compared to serial or novice entrepreneurs (Westhead, Ucbasaran, Wright, & Binks 2005). Further, the owner/manager aged 40 and above with more business experience are more likely to apply for credit facilities from banks (Wu et al., 2008). A study by Han et al. (2009a) found that the incidence of discouraged borrowers is more likely among less experienced owner/managers. This is supported by Fatoki and Asah (2011) that managerial competency measured with education, managerial experience, start-up experience and knowledge of the business has positive and significant relationship with the success in bank loan application. Freel et al. (2012) found that discouraged firms

are led by novice entrepreneurs. Further, the experience among SMEs managers or entrepreneurs is important in predicting discouragement in less developed countries (Gama et al., 2017). However, the length of owners experience in operating the business is weakly negatively correlated with the borrower discouragement (Chakravarty & Xiang, 2013).

#### ***2.5.2.4 Gender***

The gender difference among owner-managers of firms has been widely discussed and researched in previous studies. Orser, Riding and Manley (2005) have drawn three facts related to female-owned firms, namely (1) females entrepreneurs are generally involved in the retail and service sector; (2) female entrepreneurs are less likely to seek growth as compared to male; and (3) female entrepreneurs are less likely to seek external financing for their businesses. Further, female entrepreneurs are associated with lower self-confidence and more risk averse.

The female entrepreneurs tend to perceive that borrowing creates higher risk (Freel et al., 2012), which explains their reluctance towards bank loan application. However, female borrowers have no problem in maintaining good payment track records and have better (Shaharudin et al., 2016) as compared to male borrowers (Mokhtar, Nartea, & Gan, 2012; Shaharudin et al., 2016). This supports earlier findings by Roslan and Abd Karim (2009) where they showed that the probability of default among female borrowers is lower, compared to male.

Females are also less likely to apply for loans than males (Storey, 2004) because of the fear that their loan application will be rejected (Cavalluzzo et al., 2002). They face, or at least perceive that they have greater barriers in accessing finance (Carter & Rosa, 1998; and Roper & Scott, 2009) due to the view that bankers regard them as less credible (Hill, Leitch, & Harrison, 2006). However, according to Watson (2006) the difference in loan applications by female and male-owned firms is greater as the firm grows older, thus, agreeing with the pecking order theory rather than bank discrimination.

In the United States, women business owners experienced more disadvantages compared to their male peers in terms of collateral requirement (Coleman, 2000). Another possible explanation for fewer loan applications among females could be their averseness towards greater risk and the need to feel in control of their businesses (Leitch & Hill, 2006). The study by Freel et al. (2012) revealed that almost 24 percent of majority female led businesses were discouraged to apply for loans compared to 14 percent of businesses led by men. Further, Garwe and Fatoki (2012) confirmed that female SME owners are less likely to apply for loan as compared to male, and this difference is due to borrower discouragement and not due to the availability of credit. In the same vein, Chakravarty and Xiang (2013) showed that male owners are less likely to face borrower discouragement, as compared to females. In addition, the fight against gender discrimination in developed countries that started in the last decades are justified by a prove that females are more discouraged in applying for bank loan as compared to their male counterparts (Gama et al., 2017).

In contrast, study by Frangos et al. (2012) in Greece found that women are more likely to apply for bank loan as compared to men. However, Orser, Riding and Manley (2006) found that after controlling for the size and sector of the firms, women and men are equal in seeking for bank loans. In Finland, it is found that there is no significant difference in women and men business owners in their perception towards ease in getting credit from the bank (Arenius & Autio, 2006). Further, a study by Fatoki and Asah (2011) evidenced that the gender of the SME owner/manager has no significant relationship with the access to debt finance. Similarly, study by Hulten (2012) in Australia found that there is no significant difference in female and male entrepreneurs to report being discouraged. This is agreed by Eddleston, Ladge, Mitteness and Balachandra (2014) where the amount of financing received from banks are not affected by the gender of the owner of the business.

### **2.5.3 Quality of SME Business**

At the outset, it is worth noting that the definition for ‘quality of SME businesses has not reached a consensus. It is defined differently for product and services, for different industries, and for different level of dimensionality (Wicks & Roethlein, 2009). Studies incorporating the definition of quality are mainly on service quality (Cronin & Taylor, 1992; Ghobadian, Speller, & Jones, 1994; Pitt, Watson, & Kavan, 1995; Reeves & Bednar, 1994; Seth, Deshmukh, & Vrat, 2005); total quality management (Tamimi & Sebastianelli, 1996); and quality of information (Beattie, McInnes, & Fearnley, 2004; Lee, Strong, Kahn, & Wang, 2002).

Ghobadian et al., (1994) lists five generic categories in defining quality, they are (1) transcendent; (2) product led; (3) process or supply led; (4) customer led; and (5) value led. Among the five literature-based definitions, user or customer based is used by most of the firms in measuring their quality (Tamimi & Sebastianelli, 1996). This is duly stated by Reeves and Bednar (1994) where quality is excellence, value, conformance to specifications and meeting and or exceeding expectations.

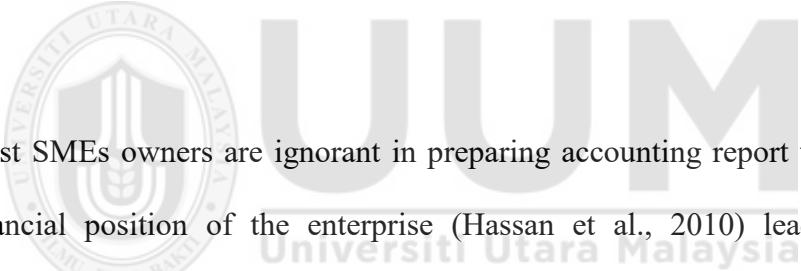
This study in identifying the discouraged borrowers among Malaysian SMEs believes that the quality of the business is one of the characteristics associated with their decision whether or not to apply for bank loan. The definition of quality of business in this study is according to Parasuraman, Zeithami & Berry (1985) where quality is the extent to which the service provided by the enterprise met the expectation of customers. In addition, the quality of a business is also related to the corporate transparency and accountability as reflected by financial information and non-financial narratives (Beattie et al., 2004).

This study follows Wicks and Roethlein (2009) who defines quality as the summation of affective evaluations by each customer of each attitude object that creates customer satisfaction. The term customer refers to any internal or external stakeholder of the organization, and attitude is defined as the particular entity of interest. Thus, the understanding of the meaning of the term 'quality' of the



business in this study refers to the features of the business that satisfy the banks and other lenders with respect to the viability and ability in loan repayment.

Knowledge on running the business is a very important measure in determining the success of an SME as well as the quality and the credibility of the business. The shortage in accounting knowledge among SME owners is one of the most common problems identified by bank officers in processing loan applications (Haron & Shanmugam, 1994). The absence of professional skills including the knowledge on running a business may result in business failure and reduce the potential of company obtaining the loan (Sheng et al., 2010).



Most SMEs owners are ignorant in preparing accounting report that reflects the financial position of the enterprise (Hassan et al., 2010) leading to bank's reluctance to approve loan for such opaque firm. The financial statement is a key factor in bank lending decisions (Edmond & Collins, 1976) and sufficient information concerning the firm's finance and governance is crucial to assess the viability of the business plan, which may provide substitute to the asset collateral (Wattanapruttipaisan, 2003).

A study by Allee and Yohn (2009) among privately held businesses found that firms with audited financial statements are more likely to be granted with loan compared to those without audited financial statements. This is supported by Hashi and Toci (2010) who showed that firms which provide clearer financial

information can easily rely on banks to finance their investments. Further, findings by Gama et al. (2017) that the probability of being discouraged from applying bank loan is higher among externally unaudited businesses. Interviews among bankers in Zairani and Zaimah (2013) revealed that it is unlikely for banks to approve a loan to SME applicants that do not provide proper financial statements.

However, lack of staff capable of producing useful financial information lead to poor quality of data provided to banks during the loan application process (Blumberg & Letterie, 2007). Another explanation of the difficulty in conveying accurate information about their business is the tendency of the owner to take responsibilities for all aspects in the business. In this aspect, the professional touch by an accountant is crucial.

Accountants are regarded as a source of business support and advice (Perry & Coetzer, 2009). In addition, Brown et al. (2011) found that audited firms are more likely to apply for a bank loan. This is supported by Chakravarty and Xiang (2013) who showed that SMEs are less likely to be discouraged from applying for bank loan when they are operating in countries where financial statements are audited by external auditors.

In a situation where there is a shortage of reliable information and track records, expert's judgments or judgmental rating are mostly used in evaluating the creditworthiness of a business (Angilella & Mazzu, 2015). Fatoki and Asah (2011)

concluded that business information has a significant positive relationship with access to finance by SMEs. Thus, SMEs that engage an accounting service whether internally or externally would be able to convey an accurate picture of the business financial position. Information asymmetry may be reduced by an audited financial statement and thus be rewarded by bank with a lower interest rate (Bauwhede, De Meyere, & Cauwenberge, 2015). This leads to a better banking experience and reduces borrower discouragement.

Firms that reach growth and expansion level as mentioned in earlier chapter would normally involve in research and development (R&D) activities and, thus need more financing to fund their R&D and expansion activities. A survey by Brown et al. (2011) among firms in 15 Eastern European countries found that firms that were denied credit or discouraged from applying for bank loan included those with little involvement in R&D activities or new product launches. This is supported by Gama et al. (2017) who confirm that the likelihood of being discouraged from applying for a loan is lower for more innovative firms.

However, Freel (2007) in his study on 256 small businesses that applied for bank loans suggested that the most innovative firms are less successful in the credit market compared to their less-innovative counterparts. This is also agreed by Angilella and Mazzu (2015) where difficulty in access to credit and information asymmetry are the main obstacle innovative SMEs face in achieving a high level of innovation.

Interestingly, Freel et al. (2012) found no correlation between strong strategic focus on innovation with discouragement in application for bank loan. This is supported by Riding, Orser and Chamberlin (2012) who found that firms that involved in R&D are more likely to choose equity financing. Further, Mina et al. (2013) indicated that loan demand among R&D-intensive firms is about the same level as less R&D-intensive firms due to uncertain innovation activities that affect the loan availability. These mixed findings require more tests on the relationship between innovation and the loan application by SMEs and approval by banks. Understanding the relationship between SME innovation and access to finance is especially critical in Malaysian context as studies have shown that innovativeness among Malaysian SMEs, when measured by adoption of information technology, are considered poor as it is perceived as difficult (Hashim, 2007). Low business development of R&D among Malaysian SMEs is also due to financial restrictions as compared to larger firms (Muhammad et al., 2010).

The Theory of Discouraged Borrowers suggests that credit seekers who do not have the level of collateral required, are discouraged from applying for a bank loan (Kon & Storey, 2003). Brown et al. (2011) in their study among firms in Eastern Europe witnessed that a high fraction of non-applicants seem to be discouraged by the tough collateral requirements.

Traditionally, lending decision by banks are based on the availability of collateral (Niinimäki, 2009; and Wattanapruttipaisan, 2003) which is a crucial element in developed markets (Menkhoff, Neuberger, & Suwanaporn, 2006) and is complimentary to relationship lending (Ono & Uesugi, 2009). Moreover, Manove, Padilla and Pagano (2001) agreed that banks rely excessively on collateral and do little screening, especially on small firms. This is also supported by Fatoki and Asah (2011) who showed that success of credit application is higher for SMEs with collateral as compared to SMEs without collateral. Haron, Said, Jayaraman and Ismail (2013) suggested that SMEs should equip themselves with collateral when submitting their loan application as it is one of the factors considered by bank in assessing loan to SMEs.



#### **2.5.4 Relationship Banking**

The relationship between banks and potential borrowers is crucial in conditions where information is difficult to obtain, which is prevalent among SMEs. Potential lenders benefit from a longer relationship with firms where they can obtain more private information about the firm. Relationship lending which is based on information gathered through close contact with a firm is different from financial statement lending, which is based on information presented in the financial statements (Jiangli, Unal, & Yom, 2008). Asymmetric information problems associated with small business financing can be mitigated by the firm-bank relationship (Baas & Schrooten, 2006; Berger & Udell, 1995; and Cole, Goldberg, & White, 2004).

SMEs are more likely to value a stable relationship with a specific bank (Zineldin, 1996) and when it comes to external financing decisions, it helps to build a close relationship with the bank or venture capital providers (Scholtens, 1999). A strong relationship between SMEs and banks offers benefits, as evidenced by Bharath, Dahiya, Saunders and Srinivasan (2007) which showed that firms with greater information asymmetry are more likely to obtain a loan from their relationship lenders.

Previous studies have also evidenced that relationship banking offers lower interest rates, less collateral requirements as well as increased credit availability and quantity (e.g. (Berger & Udell, 1995, 1998; Elsas & Krahnen, 1998; Harhoff & Korting, 1998; Hernandez-Canovas & Martinez-Solano, 2006; La Porta, Lopez, & Zamarripa, 2003; Levenson & Willard, 2000; and Voordeckers & Steijvers, 2006).

However, a Malaysian study among bank officers interviewed in Zairani and Zaimah (2013) indicated that a good relationship between SMEs and banks does not lessen the requirement for collateral. A study by Haron et al., (2013) among bank managers in the Northern region of Malaysia revealed that relationship between SMEs and bank contributes to greater chance of getting loan approval.

Further, a study by Zinger (2002) among small businesses in Northern Ontario, Canada, proves that the bank loan approval rates are higher among borrowers with existing banking arrangements. In addition, Petersen and Rajan (1994) found that

concentrated borrowing is correlated with cheaper credit and greater availability of credit, which is in contrast with firms that obtain loans from multiple banks that are charged with higher interest rates.

Informationally opaque small businesses prefer to have a single lender (Berger, Klapper, & Udell, 2001). This is supported by Nguyen and Ramachandran (2006) and Cole (1998) who found that lenders are more likely to offer credit to firms with a longer and stronger relationship as compared to firms with loans from multiple banks, where multiple banking relationships are related to the higher risk of the borrower. Further, according to Gama et al. (2017), if the banking relationship pre-exist, the private information about the borrower reduces the screening errors and application costs and therefore minimize the incidence of discouragement.

A study by Han et al. (2009) found that businesses are less likely to be discouraged when the primary source of finance is a single bank due to the reduction in screening errors and intense financial relationship. Further, a study by Chakravarty and Xiang (2013) found that the probability of small firms being discouraged borrower is reduced when there is an increase in the number of banks which they have relationships with. The concentrated relationship between business enterprises and banks leads to a deeper relationship and makes the transfer of information smoother and therefore reduces the likelihood of being discouraged (Mac an Bhaird et al., 2016). This is also agreed by Gomez-Vazquez et al. (2018) that by maintaining dispersed banking relationship, firms are more encouraged to approach bank for loan application.

According to Angelini, Salvo and Ferri (1998) lending rates increase proportionately to the length of the relationship and the members of cooperative banks enjoy easier access to credit. This is explained by the longer relationship with the bank allowing for the sharing of more information, thus, the bank screening errors would be reduced. This is also confirmed by study a by Ono and Uesugi (2009) who found that the borrowers are more likely to pledge collateral when the duration of the relationship are longer and the scope of the relationship are wider. Cole and Sokolyk (2016) also found that discouraged borrowers have a fewer source of finance and significantly shorter relationship with their primary source of finance.

However, a study by Han et al. (2009) found that discouraged borrowers have no significant difference with loan applicants in terms of length of the relationship as well as the distance with their primary lenders. A study by Jiangli et al. (2008) showed that during a financial crisis, firms in Korea and Thailand benefited from relationship banking, in contrast with firms in the Philippines where firms still had access to credit even without a strong relationship with the banks. Further, a study by Menkhoff et al. (2006) in Thailand found that firms with a house-bank relationship were more likely to pledge more collateral for the credit lines, as compared to firms without a house-bank relationship.



In short, the intensity and length of banking relationship offer a great benefit to both borrowers and lenders. More private information such as potential profit from future projects can be obtained, which helps bankers in loan approval decisions, and reduces the risk in their lending to SMEs. Simultaneously, SMEs may benefit in terms of the availability of credit and lower interest rates as well as collateral requirement. Thus, relationship banking helps to induce the confidence in applying for loans among SMEs.

### **2.5.5 Application Costs**

Application costs include financial, in-kind and psychic costs (Kon & Storey, 2003). Financial costs are payments to other parties like outside professionals involved in the preparation of information required for the purpose of the loan application to the bank. This is very crucial to the firm as a written business plan with support and advice from an accountant enhances the credibility of the loan application and helps convince banks to give approval (Blumberg & Letterie, 2007). Further, insufficient information on loan applications, and lack of proper business plan are common problems faced by bank officers in processing loan applications (Haron & Shanmugam, 1994). However, if the firm is able to or improve its ability to provide useful information, such application costs will be decreased.

In-kind cost includes the time spent in completing the bank loan application form, and travelling and meeting with the bank officers. Gama et al. (2017) in their study

among SMEs in 29 countries in Eastern Europe and Middle Asia who measure the application cost by location whether in the city or otherwise, suggest that the application cost is higher among discouraged borrowers. Study by Brown et al. (2011) found that taxing procedures and high interest rates are main reasons for small firms in Eastern Europe being discouraged to apply for loan from bank. This is supported by Chan and Lin (2013) who explained that the interest rate and loan application processing time appears to be the key factors in SMEs decision whether to apply for loan from the bank. Further, credit rationing such as bank screening and higher processing costs were found to be the determining factors affecting borrower discouragement (Xiang et al., 2014).

However, with advanced technology in information and communication, those application costs may be decreased, provided the potential borrower or the SME is able to use internet banking rather than using conventional banking. Financial provider, apart from having advantage of prior monitoring information, may also encourage their customers to make application online, at the same time reduce the application cost to the applicants (Han & Greene, 2007).

Finally, the psychic cost is the worry or anxiety experienced by the owner in sharing private information relating to their business plan and strategy to a third party like outside professionals (Kon & Storey, 2003). Again, if the firm is able to provide useful and quality information, as required by the bank on their own free will, this cost could be eliminated.

In a study by Han et al. (2009), the application costs are proxied by the physical distance of the firm with the primary lender, and whether the application was made online. It was found that none of the variables had a statistically significant impact on the discouragement. Thus, results from previous research suggest the need for further study on the association between application cost and borrower discouragement.

#### **2.5.6 Alternative Financing**

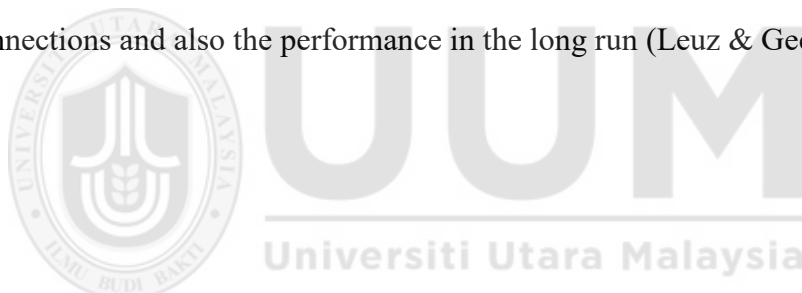
According to the Theory of Discouraged Borrowers, among the factors that contribute to the scale of discouragement, is the extent of the interest rate charged by the moneylender or financial institutions other than banks (Kon & Storey, 2003). Firms with alternative financing sources are less likely to apply for a bank loan (Brown et al., 2011). Further, a study by Beck, Lu and Yang (2015) found that informal financing is associated to a faster growth as compared to enterprises with formal finance.

In Malaysia, there are a variety of government-sponsored institutions that offer credit facilities in addition to the commercial banks and finance companies. Boocock and Wahab (2001) showed evidence that the government agencies are displacing private sector finance in Malaysia in terms of credit facilities. As Malaysia is an emerging economy and developing country, the government pays more attention to the development and financing of the SMEs. With all the

initiatives discussed earlier in this chapter, it is possible that SMEs in Malaysia have other financing alternatives, especially government related agencies.

### **2.5.7 Political Connection**

Firms with a political connection are believed to benefit in many ways. During a financial crisis, firms with a political connection gained subsidies when capital control was imposed (Johnson & Mitton, 2003) and received an allocation of capital through the mechanism of financial assistance (Faccio, Masulis, & Connell, 2006). Firms' financing strategies were found to be altered by political connections and also the performance in the long run (Leuz & Gee, 2006).



A study by Khwaja and Mian (2005) in Pakistan showed that firms with politicians on the board of directors received generous treatment by government banks, however, no political bias was found in the private banks. Another study by Claessens, Feijen and Laeven (2008) revealed that access to bank finance is easier for Brazilian firms that contribute generously during the election campaign. Later, Firth et al. (2009) found that the effect of political connection through the state minority ownership is instrumental for getting access to bank loans. In Malaysia, politically connected firms are significantly associated with high risk and therefore charged with a higher interest rate by banks (Bliss & Gul, 2012). Based on the above findings, it is possible that political connection may have an influence on the SMEs decision in the application for a loan to the bank.

Table 2.5 below presents the synthesis of previous literature related to the discouraged borrowers and demand of credit. The presentations of the table are based on the variables included in the model of this study.



Table 2.5  
*Synthesis of literature*

Author(s)	Sample	Variables and Findings			
		Firm's Attribute	Owner/Managers' Attributes	Quality of Business	Extrinsic Values
Kon & Storey (2003)	Conceptual	Nil	Nil	Accurate information; Collateral	Rigorous application procedure; Travelling time
Cavalluzzo et al. (2002)	4,570 SMEs in US	Size (larger assets less fear of denials)	Gender, Ethnicity (Females and African American less likely to apply for loan)	Nil	Nil
Khwaja & Mian (2005)	90,000 firms in Pakistan	Nil	Nil	Nil	Political bias in government bank compared to private.
Hill et al. (2006)	10 female business owner – Northern Ireland	Industry (bank unwilling to finance IT and high-tech industries)	Gender (female less likely to apply – risk averseness)	Nil	Nil
Arenius & Autio (2006)	136 businesses in service sector – Finland	Nil	Gender (no significant difference)	Nil	Nil
Faccio et al. (2006)	450 politically connected firms in 35 countries	Nil	Nil	Nil	Easy access to financial assistance during financial crisis

Table 2.5 (Continued)

Author(s)	Sample	Variables and Findings			
		Firm's Attribute	Owner/Managers' Attributes	Quality of Business	Extrinsic Values
Blumberg & Letterie (2007)	1,140 individuals plan to start business	Form of Business (single ownership not applying)	Education (higher education reduce incentive for loan application)	Collateral (increase the probability of applying)	Nil
Vos et al. (2007)	3,561 SMEs in UK and US	Size (larger firm less discouraged)	Education (higher education less discouraged)	Nil	Nil
Freel (2007)	256 small businesses in UK	Size (increase size reduce discouragement); Form of business (limited liability related to discouragement); Industry (knowledge intensive firms related to discouragements)	Experience (serial entrepreneurship related to discouragement);	Innovativeness (negative relationship)	Banking relationship beyond merely financial transactions reduce discouragement
Claessens et al. (2008)	238 Brazilian firms	Nil	Nil	Nil	Easy access to loan for firms contribute generously during election campaign.

Table 2.5 (Continued)

Author(s)	Sample	Variables and Findings			
		Firm's Attribute	Owner/Managers' Attributes	Quality of Business	Extrinsic Values
Han et al. (2009a)	3,561 firms in US	Size; Age(younger and smaller firms discouraged); Form of business (less likely to be incorporated)	Experience; Education; Ethnicity; Gender (discouraged – less experienced, ethnic-minority, higher education)	Nil	Concentrated relationship (less likely to be discouraged); Distance and online application (not significant)
Fraser (2009)	921 US small firms	Larger and older firms less likely experience loan denials.	Ethnicity (Black Caribbean more likely discouraged); Education (degree holder less likely to be denied);	Nil	Length of relationship reduces the possibility of loan denials.
Roper & Scott (2009)	22,000 individuals - UK Global Entrepreneurship Monitor Survey	Nil	Gender (females discouraged); Ethnicity (member of ethnic minority reduces discouragement); Experience (reduce the perceived financial barriers)	Nil	Nil
Roslan & Abd Karim (2009)	2,630 bank officers in Malaysia	Nil	Gender (default payment among females are lower)	Nil	Nil



Table 2.5 (Continued)

Author(s)	Sample	Variables and Findings			
		Firm's Attribute	Owner/Managers' Attributes	Quality of Business	Extrinsic Values
Firth et al. (2009)	2,400 SMEs in China	Nil	Nil	Nil	Political connections through state's minority ownership (easy access to loan)
Fatoki & Asah (2011)	107 SMEs in South Africa	Age; Size (older and bigger firms are more successful in loan application); Industry (not significant)	Gender (not significant); Education, Experience (positive relationship with success in getting credit)	Collateral; Business Information (positive relationship with success in loan application)	Nil
Brown et al. (2011)	5,040 Eastern Europe; 3,347 Western Europe	Size (smaller firms less likely to apply)	Nil	Financial statement (audited firms more likely to apply); Collateral (discouraged)	Interest rates and taxing procedure; alternative financing (discouraged)
Freel et al. (2012)	10,942 firms - (Federation of Small Businesses) in UK.	Size; age; (bigger and younger firms are more likely to apply loan) Form of business (limited liability more discouraged); industry (manufacturing more likely to apply)	Gender; experience (females and novice more discouraged); education (higher education increase confidence)	Innovativeness (no correlation)	Nil

Table 2.5 (Continued)

Author(s)	Sample	Variables and Findings			
		Firm's Attribute	Owner/Managers' Attributes	Quality of Business	Extrinsic Values
Frangos et al. (2012)	277 SMEs in Greece	Nil	Gender (Female are more likely to apply); Education and Experience (has no significant effect on discouragement)	Nil	Nil
Garwe & Fatoki (2012)	316 SMEs in South Africa	Nil	Gender (female less likely to apply)	Nil	Nil
Hulten (2012)	955 SMEs in Australia	Nil	Gender (not significant); Ethnicity (not significant)	Nil	Nil
Ajagbe et. Al (2012)	15 commercial bank officers in Malaysia	Industry (High technology SMEs pre seen as high risk)	Nil	Nil	Nil
Bliss & Gull (2012)	1667 firms among top 500 non-finance public listed companies in Malaysia	Nil	Nil	Nil	Politically connected firms regarded as high risk, therefore charged with high interest rate.

Table 2.5 (Continued)

Author(s)	Sample	Variables and Findings			
		Firm's Attribute	Owner/Managers' Attributes	Quality of Business	Extrinsic Values
Chakravarty & Xiang (2013)	8,759 firms from 10 countries	Size (larger firms less likely to be discouraged); Age (younger firm discouraged)	Gender (male less discouraged); experience (weakly negatively correlated); education (educated owners less discouraged)	Financial statement (audited less discouraged)	Multiple banking (less discouraged)
Mina et al. (2013)	1,540 US firms 2,129 UK firms	Age (negative effect on credit seeking behavior); Industry (manufacturing seek finance more often)	Nil	R&D (not significant)	Nil
Hulten & Ahmed (2013)	788 responses in Australia	Nil	Gender; and Ethnicity (not significant)	Nil	Nil
Haron et al 2013	63 bank officers in Malaysia	Nil	Nil	Collateral (considered in loan approval)	Good relationship with bank greater chance being approved.
Bhaired (2013)	829 enterprises in European Unions	Industry (construction more likely to apply loan)	Nil	Nil	Nil

Table 2.5 (Continued)

Author(s)	Sample	Variables and Findings			
		Firm's Attribute	Owner/Managers' Attributes	Quality of Business	Extrinsic Values
Zairani & Zaimah (2013)	Officers from five banks in Malaysia	Nil	Nil	Proper financial statements (bank unlikely to approve loan without proper reports)	Good relationship with banker does not lessen the collateral requirement.
Xiang et al. (2014)	2,732 Australian SMEs	Size (larger firm more likely to apply);	Nil	Nil	Processing cost (discouraged)
Bates & Robb (2015)	4,928 firms – Kauffman Firm Survey Database – US	Smaller firms discouraged to apply loan	Ethnicity (Black, Latino and Asian are more discouraged)	Nil	Nil
Mac an Bhaird et al. (2016)	6,287 European Union SMEs	Size; and Age (small and younger firms more discouraged)	Nil	Nil	Concentrated relationship banking (reduced the likelihood to be discouraged)
Cole & Sokolyk (2016)	Sample data from Federal Reserve Board (US)	Size; and Age (smaller and younger firms are more discouraged); form of business (proprietorship and partnership are more likely to be discouraged);	Gender; experience; Education; Ethnicity (female, less experienced, less educated and minority Blacks are more discouraged)	Nil	Multiple banking; and Length (firms with shorter relationship and fewer sources are more discouraged).

Table 2.5 (Continued)

Author(s)	Sample	Variables and Findings			
		Firm's Attribute	Owner/Managers' Attributes	Quality of Business	Extrinsic Values
Shaharudin et. al (2016)	50 household borrowers in Malaysia	Nil	Gender (female are good borrower compared to male); Education (influence the payment behavior)	Nil	Nil
Gama et al (2017)	11,800 enterprises from 29 countries in Eastern Europe and Central Asia	Discouraged Borrowers are younger and smaller. Ownership concentration has no significant effect.	Discouraged Borrowers - female and less experience in business	Discouraged Borrowers are externally audited less often. Loan applicants are more innovative.	Discouraged due to high application cost and concentrated banking.
Gomez-Vazquez et al (2018)	837 Spanish SMEs	Size (increase in size reduces the discouragement)	Nil	Nil	Increase in banking relationship reduces the discouragement.

## **2.6 Summary of the Chapter**

This chapter reviews the definition of SMEs, the Theory of Discouraged Borrowers and the specific characteristics of the SME business and the SME owner/manager that believed to discourage SMEs from applying for bank loan. The literature on the financing of SMEs specifically on the credit facilities by credit market is also reviewed. The next chapter presents the research methodology of this study on the factors affecting discouraged borrowers from applying for loan from banks.



## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter provides the research framework based on discussions in chapter Two. First, the overview of the philosophical assumptions applied in this research is described. The predicted relationship between dependent and independent variables are also explained in the development of hypotheses section, followed by the Discouraged Borrowers Model employed in this study. This study started with fifteen research hypotheses and subsequently two hypotheses were dropped due to the unfavorable results from reliability and validity tests.

The research design section includes the operational definition of variables, survey instruments, variable measurements, sampling and data collection method. Finally, the last section in this chapter explains the techniques of data analysis applied in this study in meeting the study objectives. The main purpose of this study is to gain a better understanding on the characteristics of the SMEs as an entity, the profile of SMEs owner/manager and other factors that are related to the discouragement among borrowers in applying for loan from banks and other financial institutions.

### 3.2 The Overview of Philosophical Assumptions

In research, it is important for the researcher to know what these philosophical assumptions are to enable him/her to conduct and/or evaluate research. According to Myers and Avison (2002) the quantitative or qualitative research is based on some underlying assumptions about what constitutes valid research and which research methods are appropriate. There are numerous philosophical assumptions and the most relevant philosophical assumptions are those related to the underlying epistemology or epistemological paradigm that guides the research (Merriam, 1998; and Myers & Avison, 2002).

Guba and Lincoln (1994) defined the term 'paradigm' as a system of philosophical beliefs or worldview that leads and governs an investigation or individuals respecting their position in that world and the range of possible relationship to it and its parts. The research paradigm shapes the entire research process and offers valuable directions and principles concerning the approach, methods and techniques of conducting a research within its philosophical setting (Guba & Lincoln, 1994). There are three paradigms that are philosophically distinct (M. D. Myers & Avison, 2002). They are (1) positivist, (2) interpretive and (3) critical.



### 3.2.1 Positivist Paradigm

In positivist paradigm, it is believed that theory is separate from observations that may be used to verify or falsify a theory (Chua, 1986). In this sense, empirical reality is objective and external to the subject (Chua, 1986). The quantitative methods of data analysis and collection are emphasized in this paradigm that allows generalization (Chua, 1986). The sources of quantitative data in social science research include survey methods, laboratory experiments and mathematical modeling (Straub, Boudreau, & Gefen, 2004).

Positivist research is evidence from the use of quantifiable measures of variables, hypotheses testing and the drawing of inferences about a phenomenon from the sample to the stated population (Orlikowski & Baroudi, 1990; and Straub et al., 2004). Thus, to convey findings of the phenomenon under study, numbers rather than words and pictures are used (Merriam, 1998). Since part of the objective of this study is to provide empirical evidence of quantifiable measures of variables, hypotheses testing and drawing of inferences about the factors influencing the business decision whether or not to apply for the bank loan among SMEs in Malaysia using survey approach, it is suggested that the positivist paradigm is more relevant to this research.

### **3.2.2 Interpretive Paradigm**

It is debated that that qualitative research such as case studies and participant observation is largely associated with “interpretivism” or is fundamentally interpretive (Chua, 1986; and Marshall & Rossman, 2006). The emphasis of interpretive paradigm is on the importance of understanding people’s perspectives in the context of conditionings and circumstances of their lives (Merriam, 1998). Further, researchers need to explore and understand the social world through the participants’ and their own perspectives (Snape & Spencer, 2003).

Since this research does not intent to build interactive relationship between the researcher and the research participants, and gathers and analyzes empirical data in qualitative manner in order to understand the factors influencing the business decision whether or not to apply for bank loan among SMEs in Malaysia, this paradigm is considered less relevant.

### **3.2.3 Critical Paradigm**

In critical paradigm, it is assumed that social reality is historically constituted and that produced and reproduced by people (Myers & Avison, 2002). Researchers within this paradigm believe that there are no theory-independent facts that can conclusively prove or disapprove a theory (Chua, 1986; and Myers & Avison, 2002). The focus of critical research is more on historical development and

changes within the totality of relations (Myers & Avison, 2002). For critical paradigm researchers, the most common data collection methods are historical development, ethnographic research and case studies (Chua, 1986).

Since this research has no intention to build a theory based on detailed explanations using ethnographic or study approach, instead, it examines the business and managers' attributes that influence the decision whether or not to apply for the bank loan, critical paradigm is also considered less relevant to this research.

#### **3.2.4 Behavioral Paradigm**

Among the objectives of this study is to understand the attributes of the business and its owner/manager that refused to apply for bank loan. Albert Bandura, a psychologist suggested that people are cognitive beings, their reaction are defined from the information processed from their environment and what they perceive concerning a situation (Bandura, 1989, 1991, 1993; Wood & Bandura, 1989)

In this theory, a person's behavior both influences and is influenced by personal features such as attitudes, abilities, goal and expectations, as well as the social environment surrounding the individual. Thus, the theory states that a person's behavior can have an impact on the environment, and at the same time, it is possible that the behavior of a person is conditioned through the use of consequences (Bandura, 1989, 1991, 2001; Zimmerman, 1989).

It is also believed that the consequence of a person's own behavior affects learning and motivation for future actions. Therefore, most human behavior is regulated by anticipation whereby people form beliefs about what they can do, and foresee the likely consequences of prospective actions, where they set goals for themselves and subsequently set courses of actions that are likely to yield preferred outcomes (Bandura, 1991, 2001; Wood & Bandura, 1989).

To summarize, since this study examines the factors influencing the business decision whether or not to apply for bank loan among SMEs in Malaysia, positivist paradigm is considered appropriate and feasible than interpretive and critical. In turn, positivist paradigm becomes the basis for developing this research framework, collecting the empirical evidence and testing the research hypotheses. This study uses survey method to gather empirical evidence. This is because such method is one of the sources of quantitative data in positivist paradigm research. Quantitative data analysis such as descriptive statistics and logistic regression are therefore adopted to answer the research questions as proposed in Chapter One. This study also related to the behavioral theory discussed above as it aims to observe the factors that influence SMEs in deciding whether to apply for bank loan or not, that is to look at how SMEs owners/managers behave when there is a need for financing.

### **3.3 Hypotheses Development**

This study intends to investigate the profiles of SMEs, owner/manager and other factors that are related to borrower discouragement towards application for bank loan in Malaysia. In this subsection, the development of hypotheses on (1) attributes of SME; (2) owner/manager profile; (3) the quality of SME businesses; and (4) the extrinsic values of the SMEs are presented based on past literature. The summary of the hypotheses is presented in Table 3.1 at the end of this sub-section.

#### **3.3.1 Attributes of SMEs**

This subsection lists down the characteristics of SMEs that are believed to be related to the firms abstaining from applying for bank loan due to anticipation that their application will be rejected.

##### ***3.3.1.1 Size and Age of the SMEs***

Firms that grow larger and older need financing for expansion and other operational costs. Having larger assets and greater sales relative to assets are among the important elements in reducing the fear of rejection among SMEs (Cavalluzzo et al., 2002). According to Vos et al. (2007), size of the firm is positively related to the decision in applying for bank loan and this prediction is supported by Han et al. (2009a) and Brown et al. (2011) that discouraged borrowers are younger and smaller, in terms of sales and number of full time

employees (Levenson & Willard, 2000). Findings by Freel et al. (2012); Levenson and Willard (2000); and Storey (2004) concluded that the size of the business positively influences the application rate for bank loans.

Youngest and smallest SMEs have bad perception in accessing to bank loans facilities (Canton et al., 2013). Further, small and young firms are more likely to be more discouraged in applying for bank loan when there is an increase in the number of domestic competitors (Chakravarty & Xiang, 2013) as compared to larger firms that are more likely to apply for bank loan as they grow larger (Xiang et al., 2014).

Later, Mac an Bhaird et al. (2016) found that younger and smaller businesses are more likely to be discouraged as small firms becomes disadvantages for bankers due to the higher cost in collecting information and older firms are in a better position to apply for bank loan due to established banking relationship. Further, older and larger firms are perceived to be more creditworthy as they already survived the high-risk start-up period and more established and diversified compared to smaller firms (Cole & Sokolyk, 2016). According to Gomez-Vazquez et al. (2018), larger firms are less opaque and they have more assets to be offered as collateral, which reduces the problem of informational asymmetries and therefore less discouraged in bank loan application.

However, the study by Hyytinen and Pajarinen (2008) found that age is more related to the opacity of the firm compared to the size. Financial characteristics like larger assets base and greater sales relative to assets were important determinants in reducing firms' fear of denial (Cavalluzzo et al., 2002).

Thus the following hypotheses on the size and age of the firm in relation to the behavior towards loan application:

H1: The size of the firm is positively (negatively) related to the bank loan application (discouragement) among SMEs.

H2: The age of the firm is positively (negatively) related to the bank loan application (discouragement) among SMEs.

### ***3.3.1.2 Form of the Business***

Sole proprietors are more likely to be discouraged from applying for bank loan due to information asymmetry and lack of collateral (Blumberg & Letterie, 2007; Han et al., 2009a; Haron & Shanmugam, 1994; and Machauer & Weber, 1998) and that they are legally liable to the loan repayment (Cowling & Mitchell, 2003). However Freel et al. (2012) found that there is a positive link between limited liability and the discouragement in bank loan applications. Later, a study by Cole and Sokolyk (2016) believed that proprietorships and partnerships are more creditworthy than corporations, where lender in satisfying their claims can seize the owner's personal assets.

Despite the mixed findings from previous studies, this study posits the following hypothesis:

H3: Sendirian Berhad firm is positively (negatively) related to the bank loan application (discouragement) among SMEs.

#### ***3.3.1.3 Industry***

Services industry faces larger competition in the market due to the lower barriers to enter. This is compared to manufacturing firms that face greater financial neediness in their operation. In Northern Ireland, it is revealed that banks are unwilling to finance businesses in ICT and other high-tech sectors (Hill et al., 2006). A study by Freel et al. (2012) concludes that knowledge-intensive service firms are more likely to be discouraged from applying for bank loan as compared to manufacturing firms. This is supported by Mina et al. (2013) that manufacturing firm seeks more external financing compared to other businesses.

This however does not conform to the study by Craig et al. (2007) who found no higher amount of loan offered to manufacturing companies. Further, Cole and Sokolyk (2016) found no significant different in industries although certain industries like manufacturing and constructions are expected to be more creditworthy due to more tangible assets owned. However, study by Mac an Bhaird (2013) indicates that construction firms are more likely to apply for loan as they are able to satisfy bank requirements on collateral.



Therefore, the following hypothesis is developed:

- H4: SMEs from non-manufacturing sector are negatively (positively) related to the bank loan application (discouragement).

### **3.3.2 Owner/Manager Profile**

This subsection discusses the profiles of SMEs owner/manager that are believed to be related to the SMEs refraining from applying for bank loan.

#### **3.3.2.1 Ethnicity**

Research in Western countries concluded that ethnicity is related to discrimination (Bates, 1991; Bates & Robb, 2013, 2015; Blanchard et al., 2008; Blanchflower et al., 1998; Cavalluzzo et al., 2002; Han et al., 2009a; Raturi & Swami, 1999; and Storey, 2004). Ethnicity of the SME owners seems to have effect on the feeling of being discouraged from applying for bank loan (Fraser, 2009). This is agreed that firms owned by minority black reported to be discouraged from applying for bank loan due to fear of rejection more than white firm owners (Carter et al., 2015; Cavalluzzo et al., 2002; and Cole & Sokolyk, 2016).

However Roper and Scott (2009) found that the membership of an ethnic group reduces the likelihood of an individual in perceiving a barrier to loan application. In Australia, there is no significant difference between migrant entrepreneurs and Australian-born entrepreneurs in discouragement (Hulten & Ahmed, 2013). In

Malaysian, the Bumiputras have been given more attention by the government through the New Economic Policy. However, Zainol and Ayadurai (2010) found that only ten percent of the total SME borrowers who obtain loan from MARA were committed to pay back their loan. Thus, the ethnicity of the owner of the SMEs may also be linked to the attitude toward the loan application.

The following hypothesis is developed:

- H5: The SME with owner-manager from the minority ethnic group is negatively (positively) related to the bank loan application (discouragement).

#### **3.3.2.2 Educational Background**

Higher education among SME owners reduce the fear of loan denial and increase the bank loan application (Storey, 2004; and Wu et al., 2008). Discouraged borrowers are less likely to have a college degree (Han et al., 2009a), and the empirical support is provided by Fatoki and Asah (2011) that the educational background has a positive and significant relationship with the access to finance. Later, Chakravarty and Xiang (2013) found that firms with more educated owner are less likely to be discouraged from applying bank loan.

On the other hand, Vos et al. (2007) concluded that less educated SME owners are more likely to apply for bank loan as compared to more educated SME owners. This is agreed by Blumberg and Letterie (2007) who found that higher education reduces the incentive for loan application.

However, studies by Blanchflower et al. (1998); Cavalluzzo et al. (2002); Frangos et al. (2012); and Raturi and Swami (1999) reported that there is no significant effect on the denial rate related to education or work experience of the applicants.

Thus, the following hypothesis is developed:

- H6: The educational background of the owner-manager of the firm is positively (negatively) related to the bank loan application (discouragement) among SMEs.

### **3.3.2.3 Experience**

Owner-managers with more diverse experience and resources are positively related to loan application, as compared to a serial or novice entrepreneurs (Westhead et al., 2005; and Wu et al., 2008). Discouraged borrowers are more common among less experienced owner/managers (Han et al., 2009a). In Han et al., (2009a), the average number of years among discouraged borrowers is 11.5 years, as compared to 13.5 years experience among owners/managers who applied for bank loan. This is supported by Fatoki and Asah (2011) that managerial competency which includes the experience in handling businesses is positively significant with the success in obtaining a bank loan, and also by Freel et al. (2012) that discouraged firms are led by novice entrepreneurs.

SME owners with more experiential capital have more confidence as compared to newcomers in bank loan application. Less experienced managers or entrepreneurs

lead to incidence of discouraged borrower due to fear of rationing and negative perception about loan procedures (Gama et al., 2017). However, the length of owners experience in operating business is weakly negatively correlated with the discouragement (Chakravarty & Xiang, 2013).

Therefore, the following hypothesis is developed:

H7: The experience of the owner/manager of the firm is positively (negatively) related to the bank loan application (discouragement) among SMEs.

#### **3.3.2.4 Gender**

Females are less likely to apply for loans than males (Storey, 2004) because of the fear that their application for loan will be rejected (Cavalluzzo et al., 2002). A home-based businesses run by females need less financial service (Arenius & Autio, 2006). Past experience in seeking financial assistance from the bank among females also contributes to the bad perception towards application for bank loan (Kon & Storey, 2003). Further, female owners of business start-up are more likely to perceive financial barrier to their business (Carter & Rosa, 1998; and Roper & Scott, 2009) with the view that bankers regards them as less credible (Hill et al., 2006).

A study by Freel et al. (2012) revealed that almost 24 percent of majority female led businesses were discouraged to apply for loans compared to 14 percent of

businesses led by men. This is agreed by Garwe and Fatoki (2012) who found that females are less likely to apply for loan from bank and agreed by Chakravarty and Xiang (2013) that males owners are less likely to be disheartened from applying for a bank loan. Further, study by Gama et al. (2017) provides strong evidence regarding gender discrimination where female managers tend to be more discouraged from applying for credit.

In contrast, Orser et al. (2006) found that after controlling for the size and sector of the firms, women and men are equal in seeking for bank loans. This is supported by few studies that there is no significant difference in female and male entrepreneurs to report being discouraged from applying for bank loan (e.g. Arenius & Autio, 2006; Eddleston et al., 2014; Fatoki & Asah, 2011; and Hulten, 2012).

Thus, the following hypothesis is developed:

H8: The female SME owner or manager is negatively (positively) related to the application (discouragement) for bank loan.

### **3.3.3 Quality of SME Business**

This subsection discusses the elements considered as the quality of the business. They are (1) the availability of the complete and reliable accounting information related to the business; (2) the innovativeness of the business; and (3) the readiness of the business to meet the collateral requirement by banks or loan provider.

### ***3.3.3.1 Accounting Information***

The screening error by the banks is predicted to be one of the factors that discourage good borrowers from applying for bank loans (Kon & Storey, 2003) where investors (including bankers) are frequently unable to determine the quality of potential borrowers (Brewer, 2007). Business information has a significant positive relationship with the access to finance by SMEs (Fatoki & Asah, 2011). The credit information rating and evaluation by third parties plays an important role to overcome these problems. This situation contributes to the discouragement among SMEs, where poor credit history or firm's financial condition becomes the leading reasons for owners believing that their application will be rejected (Cavalluzzo et al., 2002).

In addition, professional accountants are crucially needed as a source of business support and advice (Perry & Coetzer, 2009) and capable to produce quality information that may increase the potential of company gaining loan (Blumberg & Letterie, 2007; and Sheng et al., 2010). Similarly, firms with compiled and audited financial statements are more likely to apply for bank loan (Brown et al., 2011) and more likely to be granted with credit facilities by lenders compared to those without audited financial statements (Allee & Yohn, 2009).

Further, firms may easily rely on banks for financial assistance or less likely to be discouraged when they are able to provide clearer financial information (Hashi & Toci, 2010) and financial statements being audited by external auditors

(Chakravarty & Xiang, 2013). The small and unlisted businesses tend to lack in audited financial statements and therefore having difficulty in signaling their quality to loan provider (Gama et al., 2017). Firms with quality financial information may also be rewarded by bank with a lower interest rate (Bauwhede et al., 2015).

Thus, the following hypothesis is developed:

H9: SMEs with accounting information being compiled, reviewed and/or audited by a professional accountant are positively (negatively) related to the bank loan application (discouragement).

#### **3.3.3.2 Innovativeness of SMEs**

Firms that were denied credit or discouraged from applying for a bank loan include those less likely to be involved in R&D or the introduction of new products (Brown et al., 2011). However, Freel et al. (2012) found that the most innovative firms are less successful in the credit market compared to their less-innovative counterparts and this is supported by Angilella and Mazzu (2015) that SMEs with high level of innovation found more challenging obstacles in accessing to credit facilities as compared to those with lower level of innovation.

Further empirical evidence on the innovativeness also provided by Mina et al. (2013) that uncertain innovation activities by R&D intensive firms are considered as undertaking risky projects resulted in no difference between demand for external financing among R&D intensive firms and less R&D intensive firms. Study by

Gama et al. (2017) suggests that discouraged borrowers are less innovative where only a minority of discouraged borrowers launched at least one innovation in the market within three years. These mixed findings require more tests on the relationship between innovation and the application for loan by SMEs and approval by banks.

Thus, the following hypothesis is developed:

H10: Innovativeness of the SMEs is positively (negatively) related to the bank loan application (discouragement).

#### **3.3.3.3 Collateral Availability**

Traditionally, bank lending decisions are based on the availability of collateral (Menkhoff et al., 2006; Niinimäki, 2009; Ono & Uesugi, 2009; and Wattanapruttipaisan, 2003) and most bankers do little screening especially on small firms with collateral (Manove et al., 2001). Success in bank loan application are significantly related with collateral as compared to those without collateral (Fatoki & Asah, 2011).

Good borrowers usually know the requirements of collateral act as a guarantee of their quality and borrowers who do not have the level of collateral required, are discouraged from applying for a bank loan (Kon & Storey, 2003). High fraction of non-applicants seem to be discouraged by the tough collateral requirements



(Brown et al., 2011). However, a study by Ono and Uesugi (2009) found that banks that concentrate on SME lending are less likely to require collateral.

Thus, the following hypothesis is developed:

H11: The availability of collateral is positively (negatively) related to the bank loan application (discouragement) among SMEs.

### **3.3.4 Extrinsic Values of SMEs**

This subsection discusses the elements which is not part of the essential nature of the firm, operating from outside and acting as part of the character of the firm. They are (1) the relationship between the business and loan provider; (2) the costs incurred in the course of loan application; (3) the alternative financing facilities that are available apart from the bank and other financial institution; and (4) the influences from the involvement in the political activity by the business or the owner/manager of the business.

#### ***3.3.4.1 Relationship Banking***

The banking relationship affects the pricing and availability of credit (Berger et al., 2001) reduces the collateral requirement (Berger & Udell, 1995; and Voordeckers & Steijvers, 2006), information symmetry (Bharath et al., 2007) and extends credit to existing borrowers (Cole, 1998). Therefore, the longer the length

of the relationship and high quality borrowers are less likely to be discouraged (Han et al., 2009a). A longer relationship reduces the probability of screening errors (Kon & Storey, 2003) and application cost (Gama et al., 2017) that may discourage the good borrowers from applying for loans. Further, firms with multiple bank relationship may increase the competition in the credit market and also improve success in seeking for loan (Gomez-Vazquez et al., 2018).

A study by Ono and Uesugi (2009) discovered that the borrowers are more likely to pledge collateral when the duration of the relationship is longer and the scope of the relationship is wider. Further, a study by Chakravarty and Xiang (2013) evidenced that an increase in the number of banks which SMEs have relationships with, reduces the probability of small firms being discouraged in bank loan application. Firms with concentrated banking (where banking activities are concentrated with only one bank) are less likely to be discouraged as the deeper relation already developed and facilitates the smooth transfer of information (Mac an Bhaird et al., 2016). Further, discouraged borrowers are found to have a fewer source of financial services and significantly shorter relationship with their primary source of finance (Cole & Sokolyk, 2016).

On the other hand, Menkhoff et al. (2006) found that long credit relationships do not reduce the collateral requirement. Jiangli et al. (2008) revealed that in Indonesia, during the financial crisis, lending relationships failed to play a significant role compared to the effect of accounting disclosure on credit availability. However, the results were in contrast to Korea and the Philippines.

Besides, multiple relationships increase the price and reduce the availability of credit (Petersen & Rajan, 1994) as banks prefer to be the sole source of financing (Cole et al., 2004).

Thus, the following hypothesis is developed:

H12: SMEs with a good relationship with a bank are positively (negatively) related to the bank loan application (discouragement).

#### ***3.3.4.2 Application Cost***

Application costs are among the reasons for discouragement among good borrowers (Kon & Storey, 2003; and The Economist Intelligence Unit, 2009). Small firms are more discouraged in applying for bank loan due to taxing procedures and high interest rates (Brown et al., 2011), loan application processing time (Chan & Lin, 2013) and credit rationing such as bank screening and higher processing costs (Xiang et al., 2014).

However, a study by Han et al. (2009a) found that physical distance and whether the application made online are not statistically significant with the discouragement. This is agreed by Gama et al. (2017) who measure the application cost by the location of the firm whether in the capital or smaller city and found that it significant to the incidence of discouragement. Further, application cost according to the Theory of Discouraged Borrowers, includes the financial, in-kind and psychic costs.

This study focuses on the in-kind cost that is, the willingness of the potential borrower to meet the bank officers and using internet in applying bank loan using on-line application instead of conventional way. This study also emphasis on the psychic cost where the willingness of the SMEs in sharing financial and non-financial information with bank officers, external accountants and consultants. Thus, the willingness of the SMEs owners/managers will lead to the application for bank loan and reduce the probability of discouragement.

Therefore, the following hypothesis is developed:

H13: The application cost is positively (negatively) related to the bank loan application (discouragement) among SMEs.

#### ***3.3.4.3 Financing Alternatives***

The existence of many other sources of finance other than banks might also contribute to the not-to-apply attitude among SMEs. Sources like family, friends and the help from the government also play an important role in financing the SMEs (Boocock & Wahab, 2001). Firms with alternative financing sources are less likely to apply for a bank loan (Brown et al., 2011) and among the factors that contribute to the scale of discouragement, is the extent of the interest rate charged by the moneylender or financial institutions other than banks (Kon & Storey, 2003). Therefore, the existence of alternative sources of financing might also related to the discouragement among SMEs towards bank loan application.

Thus, the following hypothesis is developed:

- H14: The presence of financing alternatives is negatively (positively) related to the bank loan application (discouragement) among SMEs.

#### ***3.3.4.4 Political Connections***

Political connections are believed to have a significant effect on bank loan financing among SMEs (Claessens et al., 2008; Faccio et al., 2006; Firth et al., 2009; and Leuz & Gee, 2006). Firms with politicians on the board of directors received generous treatment by government banks, however, no political bias was found in the private banks (Khawaja & Mian, 2005). Politically connected firms when facing financial distress, may easily access to financial assistance (Faccio et al., 2006).

Another study by Claessens et al. (2008) revealed that access to bank finance is easier for Brazilian firms that contribute generously during the election campaign and also influence by politician related to government contract may also lead to the opportunities in attract financing. Later, Firth et al. (2009) found that the effect of political connection through the state minority ownership is instrumental for getting access to bank loans. The above findings suggest that, it is possible that political connection may have an influence on the SMEs decision in the application for a loan to the bank.

Thus, the following hypothesis is developed:

H15: Political connection is positively (negatively) related to the bank loan application (discouragement) among SMEs.

This hypotheses development section presents the arguments from literatures on the factors influencing the decisions among owner/manager of SMEs in relation to the application of loan from the bank. A total of fifteen (15) hypotheses are generated and the summary of the hypotheses are presented in Table 3.1 below.



Table 3.1  
*Summary of Hypotheses*

<b>Hypotheses</b>	
H1:	The size of the firm is positively (negatively) related to the bank loan application (discouragement) among SMEs.
H2:	The age of the firm is positively (negatively) related to the bank loan application (discouragement) among SMEs.
H3:	Sendirian Berhad firm is positively (negatively) related to the bank loan application (discouragement) among SMEs.
H4:	Type of industry is negatively (positively) related to the bank loan application (discouragement) among SMEs.
H5:	The ethnicity of the owner-manager of the firm is negatively (positively) related to the bank loan application (discouragement) among SMEs
H6:	The educational background of the owner-manager of the firm is positively (negatively) related to the bank loan application (discouragement) among SMEs.
H7:	The experience of the owner/manager of the firm is positively (negatively) related to the bank loan application (discouragement) among SMEs
H8:	The female SME owner or managers is negatively (positively) related to the application (discouragement) for bank loan among SMEs.
H9:	SMEs with accounting information being compiled, reviewed and/or audited by a professional accountant are positively (negatively) related to the bank loan application (discouragement) among SMEs.
H10:	Innovativeness of the SMEs is positively (negatively) related to the bank loan application (discouragement) among SMEs.
H11:	The availability of collateral is positively (negatively) related to the bank loan application (discouragement) among SMEs.
H12:	SMEs with a good relationship with a bank are positively (negatively) related to the bank loan application (discouragement) among SMEs.
H13:	The application cost is positively (negatively) related to the bank loan application (discouragement) among SMEs.
H14:	Financing alternatives is negatively (positively) related to the bank loan application (discouragement) among SMEs.
H15:	Political connection is positively (negatively) related to the bank loan application (discouragement) among SMEs.

### **3.4 Research Design**

This section presents the overall strategy chosen to integrate the different components of this study in a comprehensive way to ensuring that the research problems are effectively addressed. It includes the measurement, collection procedures and analysis of data.

#### **3.4.1 Operational Definition**

Based on the hypotheses discussed in the previous subsection, Figure 3.1 shows the Discouraged Borrowers Model. The size, age, legal form and industry are independent variables representing the attributes of SMEs itself. Ethnicity, education, entrepreneurship experience and gender are independent variable representing the owner or manager of the business who is the decision maker. The quality of business is embodied by the independent variables such as accounting information and innovativeness in the SMEs and the availability of the collateral.

The extrinsic values comprise the relationship between the SMEs and the bank. Included in the extrinsic values is the application cost inspired by the Theory of Discouraged Borrowers by Kon and Storey (2003). This contains financial, in-kind and psychic costs. Finally, financing alternatives and political connections are also independent variable introduced stimulated by previous studies which has not been tested before in the context of discouraged borrowers.



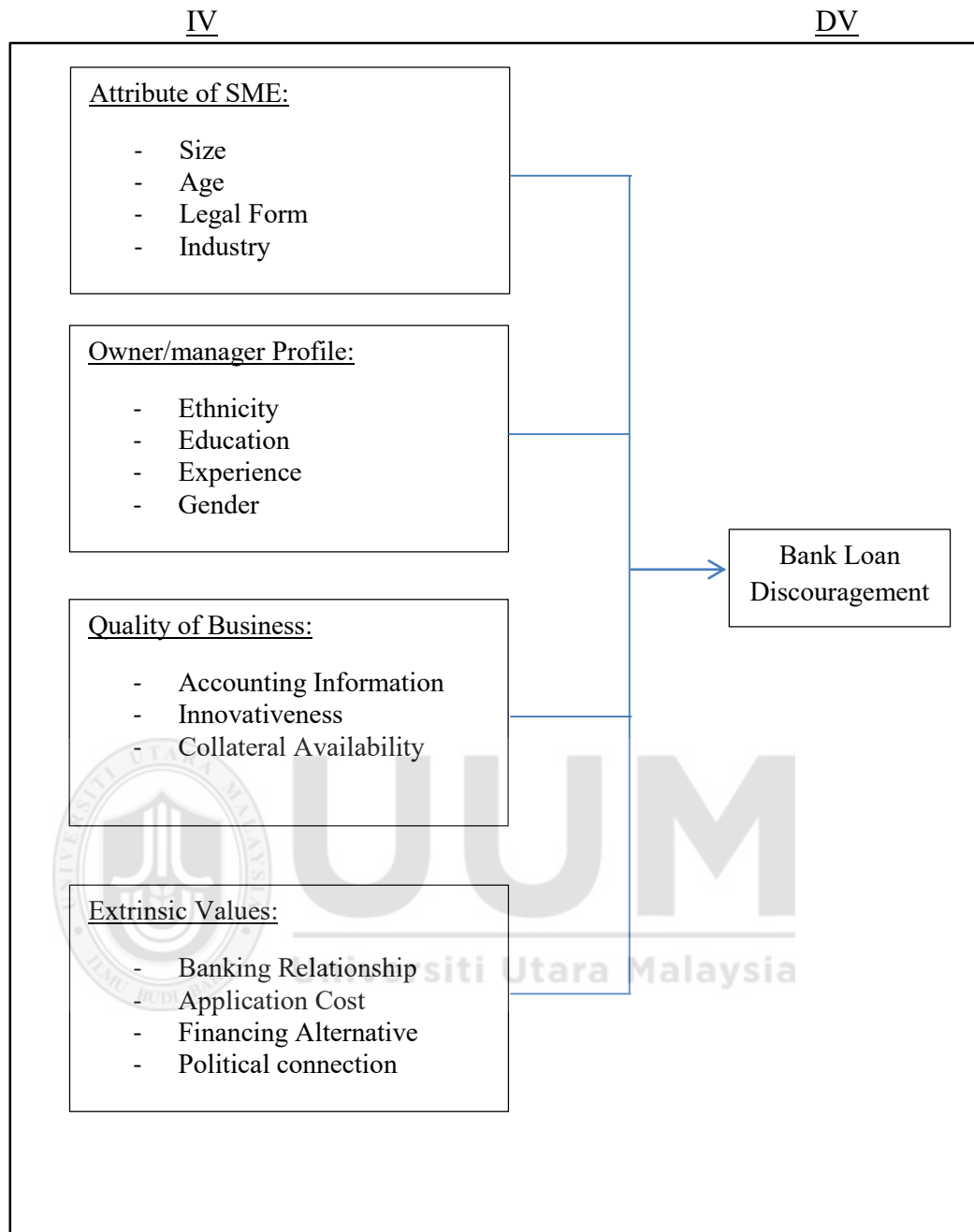


Figure 3.1  
*Model of Discouraged Borrowers*

The following model is developed to help explaining the loan application decision by SMEs. Logistic regression or logit model is to be applied as it is useful in describing the relationship between the independent variables and a binary response variable, that is, apply or not to apply for bank loan. The model is:

$$\begin{aligned} \text{APPLY}_{\text{LOAN}} = & \beta_0 + f(\beta_1 \text{Size} + \beta_2 \text{Age} + \beta_3 \text{Legal} + \beta_4 \text{Ind} + \beta_5 \text{Ethnic} + \beta_6 \text{Edu} \\ & + \beta_7 \text{Exp} + \beta_8 \text{Gend} + \beta_9 \text{Accinf} + \beta_{10} \text{Innno} + \beta_{11} \text{Coll} + \beta_{12} \text{Rel} \\ & + \beta_{13} \text{AC} + \beta_{14} \text{Alt} + \beta_{15} \text{Pol} + \varepsilon) \end{aligned}$$

Where:  $\text{APPLY}_{\text{LOAN}}$  = Decision whether to apply or not to apply for bank loan

*Size* = Size of the company

*Age* = Age of the company

*Legal* = Legal form

*Ind* = Industry

*Ethnic* = Ethnicity of the owner

*Edu* = Education level of the owner

*Exp* = Entrepreneurship experience of the owner

*Gend* = Gender

*Accinf* = Accounting information

*Inno* = Innovativeness

*Coll* = Availability of collateral

*Rel* = Relationship with the bank

*AC* = Application costs

*Alt* = Financing alternatives

*Pol* = Political connection

The model is inspired by Freel et al. (2012) that employed a binary probit model in investigating the characteristics that related to the discouragement. This study also stimulated by Chakravarty and Xiang (2013) who used logistic regression in

exploring the correlation between discouraged borrowers as dependent variables and independent variables in their study.

### **3.4.2 Survey Instrument**

This study uses questionnaire as its tool in gathering data. According to Cooper and Schindler (2003), the survey is the most common method in generating primary data as it provides quick, inexpensive, efficient and accurate means of assessing information about the population.

The questionnaire is prepared in two versions. That is in Bahasa Malaysia and English. The back translation procedure is applied where the questionnaire is rendered into the second language by a translator and be translated back to the original language (Beaten, Bombardier, Guillemin, & Ferraz, 2000). This procedure is believed to be important to avoid the possibility of the results not due to differences in the variables being measured, but due to errors in translation (Chapman & Carter, 1979).

The questionnaire is designed in two sections (Refer to Appendix A and B for both English and Bahasa Malaysia versions). First, is to identify capital seekers and non-capital seekers and whether they are bank loan applicants or non-applicants. The attributes of the SMEs and the profile of the SME owner/manager are also asked in this section. Questions in this section require binary responses (yes or

no), and categorical are used to obtain absolute data related to the attributes of business and the owner's profile.

The second section looks at the activity of the company. In this section, the categorical scale consisting of four options is applied. Some of the questions in this section were adapted from previous research. However, the previous research applied a dichotomous variable or simple scale, that is, a dummy variable for two categories of answer, which is insufficient in making fine distinctions in attitudes (Zikmund, 2003). The nominal data contains too little information to apply with many powerful statistical techniques (Baker, 2002). Thus, a category scale is then applied in this study as it offers a more sensitive measure than a scale with only two responses as well as providing more flexibility for respondents in the rating task (Zikmund, 2003).

The survey questionnaires are adapted from previous studies as shown in Table 3.2. The items in each construct are extended from various studies to measure the variables. The quality of business reflects the preparation and reporting of business financial information adapted from previous studies (eg. Blumberg & Letterie, 2007; Brown et al., 2011; Fatoki & Asah, 2011; Grilli, 2005; Han et al., 2009a; and Hyytinen & Pajarinen, 2008); innovativeness that engagement of R&D activities and the frequency of business produce or use new product or services, ideas and method of operation as measured in Cosh et al. (2009); Erdil et al. (2003); and Mina et al. (2013) using two responses data; and the availability of collateral in the business in this study is measured by whether the collateral owned by owner or business or no collateral at all, inspired by Blumberg and Letterie (2007); and

Fatoki and Asah (2011) that asked whether the respondent possess a house using zero and one options.

The relationship between business and bank/s measured under relationship banking by looking at the length and multiple banks relationship practiced by the business. The questions under this construct are adapted from various studies (eg. Berger et al., 2001; Berger & Udell, 1995; Chakravarty & Xiang, 2013; Cole et al., 2004; Cole & Sokolyk, 2016; and Han et al., 2009b).

The application cost in this study is stimulated by the Theory of Discouraged Borrowers that consist of financial cost that asks whether the business sought professional advice in preparing the documents prior to the application for loan (Brown et al., 2011; Frangos et al., 2012; Xiang et al., 2014); in-kind cost that related to the method of application whether online or conventional as applied by Bates and Robb (2015); and Han et al., (2009a) by looking at the distance in miles and location; and psychic cost that focuses at the willingness of the business in sharing information with bankers and outside professionals or consultants. The psychic cost items in this study are newly generated and never been tested, inspired by the Theory of Discouraged Borrowers by Kon and Storey (2003).

Financing alternatives variable indicates whether the business obtain loan or grant from government agency, family and friends, illegal money lenders or creditors driven by the Pecking Order Theory and study by Brown et al. (2011).

Finally, the items under political connection variable are constructed in a way that to comprehend whether the owner of a business is an active politician; or the sales/revenue are related to the government offices or agencies; or whether the business ever made any contribution during election campaign. These items are stirred by related studies on political connections (eg. Claessens et al., 2008; Faccio et al., 2006; Firth et al., 2009; Khwaja & Mian, 2005).

Table 3.2 shows the summary of variable measurement used in previous studies and current.



Table 3.2

*Definitions of Variables in Current and Past Studies*

<b>Variables (in current study)</b>	<b>Descriptions</b>	<b>Measurement Used in Previous Studies</b>	<b>Supporting Literature</b>
Dependent Variable	=1 if the firm applied for loan for the last 3 years; = 0 if otherwise	Application always approved (0,1); Application always denied (0,1)	Storey (2004); Blumberg and Letterie (2008); and Han et al. (2009)
<b>Independent Variables:</b>			
<u>Attributes of SMEs</u>			
Size	Number of employees	Number of employees (full time)	Cavalluzzo et al. (2002); Storey (2004); Han et al. (2009a); Freel et al. (2012); Chakravarty and Xiang (2013); Xiang et al. (2015); Mac an Bhaid et al. (2016); and Cole and Sokolyk (2016)
Age	Number of years the firm was established	Number of years has been in trading	Han et al. (2009); Firth et al. (2009); Freel et al. (2012); Chakravarty and Xiang (2013); Mac an Bhaid et al. (2016); and Cole and Sokolyk (2016)

Table 3.2 (Continued)

Variables	Descriptions	Measurement Used in Previous Studies	Supporting Literature
Legal Form	Categorical variable indicating the status of the business whether sole proprietor, partnership, private limited or public limited company	Limited liability company or otherwise (0,1)  Proprietorship, partnership or limited liability company	Han et al. (2009a); Freel et al. (2012); and Cole and Sokolyk (2016)
Industry	Categorical variable indicating the nature of business whether manufacturing, retail/trading, service provider or others.	Categorical variable indicating “production”, “retail & wholesales” or “knowledge services”.	Freel et al. (2012); and Cole and Sokolyk (2016)
<b><u>Owner-Manager Profile</u></b>			
Ethnicity	Ethnicity of owner-manager whether Malay, Chinese, Indian or others.	Hispanic, African-American, Asian; Migrant, Australia-born.	Cavalluzzo et al. (2002); Cole et al. (2004); Han et al. (2009); raser (2009); Hulten and Ahmed (2013); and Cole and Sokolyk (2016)



Table 3.2 (Continued)

Variables	Descriptions	Measurement Used in Previous Studies	Supporting Literature
Education	Indicates the level of education from school certificate to higher levels.	College degree or above (0,1)	Blumberg and Letterie (2007); Han et al. (2009); Fatoki and Asah (2011); Freel et al. (2012); Chakravarty & Xiang (2013); and Cole and Sokolyk (2016)
Experience	Previous entrepreneurship experience in years	Number of years manager hold the position in the firm and previous firm/s.	Cavalluzzo et al. (2002); Firth et al. (2009); Han et al. (2009a); Fatoki and Asah (2011); Freel et al. (2012); Chakravarty and Xiang (2013); and Cole and Sokolyk (2016)
Gender	=0 if male; = 1 if female	Male, female (0,1)	Cavalluzzo et al. (2002); Han et al. (2009a); Fatoki and Asah (2011); Freel et al. (2012); Frangos et al. (2012); Chakravarty and Xiang (2013); and Cole and Sokolyk (2016)

Table 3.2 (Continued)

Variables	Descriptions	Measurement Used in Previous Studies	Supporting Literature
<u>Quality of Business</u>			
Accounting Information	Indicates the preparation of financial statements by professional; and whether they are audited or not.	Prepared with the aid of accountant with compliance to legal and professional standards. Professional service (0,1); Authorized auditor (0,1);  Financial statement audited / not	Grilli (2005); Blumberg and Letterie (2008); Hyytinen and Pajarinen (2008); Han et al. (2009a); Brown et al. (2011); and Fatoki and Asah (2011)
Innovativeness	Indicates the frequency of the engagement in research and development or produce/use of new product/services, ideas and method of operation.	Firm developed new commercialisable technology (0,1)	Erdil et al. (2003); Cosh et al. (2009); Brown et al. (2011); and Mina et al. (2013)

Table 3.2 (Continued)

Variables	Descriptions	Measurement Used in Previous Studies	Supporting Literature
Collateral	Indicates the availability of collateral, whether owned by business or the owner	Respondent possess a house (0,1)	Blumberg and Letterie (2008); and Fatoki and Asah (2011)
<u>Relationship Banking</u>			
Length	Indicates the length and condition of relationship with current lender.	Length of relationship with current lender (years)	Berger and Udell (1995); Cole et al. (2004); and Cole and Sokolyk (2016)
Multiple	Indicates whether the company deals with more than one bank.	Firm has more than one bank (0,1)	Berger et al. (2001); Han et al. (2009a); Chakravarty and Xiang (2013); Mac an Bhaid et al. (2016); and Cole and Sokolyk (2016)
<u>Application Costs</u>			
Financial	Indicate whether the company sought outside professional advice	Screening and higher processing cost; Interest rates	Brown et al.(2011); Frangos et al. (2012); and Xiang et al. (2015)

Table 3.2 (Continued)

Variables	Descriptions	Measurement Used in Previous Studies	Supporting Literature
In-kind	Indicates whether the company deals and apply loan via online or conventional method.	Distance (miles); Apply loan online (0,1); Location	Han et al. (2009); and Bates and Robb (2015)
Psychic	Indicates whether the management of company willing to share information with bankers and outside professional/consultant.	Nil	Nil
<u>Financing Alternatives</u>	Indicates whether the company obtain loan/grant from government agency, family and friends, illegal money lender or creditors.		Brown et al. (2011)
<u>Political Connection</u>	Indicates whether the owner of the company is an active politician, the sales of the company / contract related to the government offices or agencies, and whether the company ever made any contribution during election campaign.	State minority ownership (0,1); absolute amount of contributions to winning / losing deputies; connected through top officer (0,1) / larger shareholder (0,1); politician in board of directors (0,1)	Khwaja and Mian (2005); Faccio et al. (2006); Claessens et al. (2008); and Firth et al. (2009)

### **3.4.3 Measurement of Variables and Coding**

This subsection provides the measurement of each of independent variables and dependent variable as well. The measurements of each of variables are inspired by past literature as presented in Table 3.2 above.

#### ***3.4.3.1 Attributes of SME***

The attributes of SMEs that are anticipated to be related to the discouragement of loan application that include the size, age, the legal form of the business and type of industry. The first three questions are related to whether the company has made any bank loan application or not as well as the need for capital. This is to identify whether the respondent is a capital seeker or not. Furthermore, a question on whether the business is managed by the owner or not was also asked to fit the term ‘owner-manager’ of the business, as discussed before.

The size of the firm is measured by the number of full time employees (Freel et al., 2012; and Storey, 2004). The average total assets and average total revenue were also asked for further analysis if needed in future. Further, the age of the firm refers to the number of years since the firm was established or commenced operation (Firth et al., 2009; and Han et al., 2009a).

The legal form of the business relates to whether the business is sole proprietor, partnership, private limited or limited company. The type of industry is divided into manufacturing coded as 1, manufacturing related service (2), trading and services including IT (3), constructions (4) and others that were stated by respondent in open-ended column.

#### ***3.4.3.2 Owner/Manager Profile***

Among owner-manager profile that relates to the discouragement in bank loan application are ethnicity, education, previous entrepreneurship experience and gender. The respondents were asked concerning the ethnicity of the owner-manager (Cole et al., 2004) whether Malay coded as 1, Chinese (2), Indian (3) or others with open ended where respondents that fall under others are able to write their ethnicity (4) . Education indicates whether the firms' owner-manager is a graduate or not (Han et al., 2009a). The questionnaire provides a few boxes for respondents to check for their highest education, i.e. whether Sijil Pelajaran Malaysia (SPM) coded as 1; Sijil Tinggi Persekolahan Malaysia (STPM) or certificate (2); diploma (3); first degree (4); professional qualification (5); and post graduates (6).

In the experience of the owner/manager part, respondents have to respond concerning the number or years of previous entrepreneurship experience (Cavalluzzo et al., 2002; and Firth et al., 2009). Gender of the owner-manager is identified with a dummy variable that carries the value of zero for male and one for female (Han et al., 2009a).

#### ***3.4.3.3 Quality of the SME Business***

The quality of business is represented by the value of accounting information, the innovativeness of the firm and the availability of collateral. Accounting information carries more value if prepared and/audited by a professional accountant/auditor. Previous studies used a dummy variable with a value of one given if the firm employs internal or external professional accountant/auditor and zero value for otherwise (Blumberg & Letterie, 2007; Han et al., 2009a; and Hyytinen & Pajarinen, 2008). However, this study applies category scales that are a more sensitive measure than a scale with only two response categories (Zikmund, 2003).

Professional in this study is defined as engaged in an activity as paid occupation rather than as an amateur (Readers' Digest, 2001). The use of the word 'accountant' in Malaysia is protected under the Accountants Act 1967 where not everyone with an accounting or finance degree can be referred as an accountant unless they become a member of the MIA (Malaysian Institute of Accountants). Therefore, professional accountant in the questionnaire refers to a member of the MIA.

Innovativeness of the firm is represented by whether the firm has produced or developed more products that can be commercialized (Cosh et al., 2009) and the investment in R&D (Brown et al., 2011). To be more specific, this study adopts the measurement by Erdil, Keskin and Erdil (2003) on firms' innovativeness. The

questions relate to the frequency of new ideas, products and services as well as the method of operation.

Finally, the availability of collateral among the respondents also believed to contributes to the quality as future borrowers (Blumberg & Letterie, 2007). Questions on the availability, sufficiency and whether the assets are owned by the business or the owner of the business are also asked in this section in the questionnaire.

#### ***3.4.3.4 Extrinsic Values of SME***

The relationship under this value represents the length of the relationship between the firm and the bank to which they applied for loan and whether the firm has established a relationship with more than one bank. The length of relationship with the current lender is asked in the first section of the questionnaire where the respondents are required to state the number of years the relationship with the bank has been established (Berger & Udell, 1995; and Cole et al., 2004). The last questions in this section asked whether the respondents have a relationship with other banks or more than one bank (Berger et al., 2001).

Application costs refer to the financial, in-kind and psychic costs. Finance costs are any payment made/to be made related to the application for the bank loan. Respondents are asked whether their application for the bank loan involves any amount of money. In-kind cost like the time spent on travelling and frequencies of meeting with bank officer are represented by the method of application, whether



conventional way of travelling to the bank and meeting with officer regularly, or submitting application via online or internet banking. The respondents are asked to state their willingness to share their personal and business information with the bank, to represent the psychic cost. The questions are constructed based on the Theory of Discouraged Borrowers (Han et al., 2009a) that measure application cost by the proxy of the physical distance of the firm and the primary lender and whether the application was made online. Thus, this study seems to contribute to the body of knowledge concerning the measurement of the application cost related to the theory.

This variable refers to the alternative loans offered by institutions other than banks – loans from government agencies, family, friends or other sources. The respondents are asked whether they have an existing loan or applied for loan from other sources besides a bank. The question relates to loans or grants obtained from the government or its agencies, family and friends, unlicensed moneylender and also credit from suppliers. An open-ended question is included to allow respondents to state other resources of financing. This is expected to contribute to richer information related to the alternatives in business financing other than bank loans.

In previous studies, political connections were measured by closeness to the prime minister/ president (Johnson & Mitton, 2003; and Leuz & Gee, 2006); politicians on the board of directors (Faccio et al., 2006) or large shareholders (Khwaja & Mian, 2005); and the amount of donation or contribution during the election campaign (Claessens et al., 2008).

The political connection variable in this study is partly adapted from Firth et al. (2009) and includes whether the owner of the company is an active politician, and whether the company's sales are related or subject to contract or understanding with any of the government agencies. The question whether the company has ever made any contribution to a political party during the election campaign is also asked, which was inspired by Claessens et al. (2008).

However, the studies by Firth et al. (2009) and Claessens et al. (2008) are related to the supply perspective that is the loan approval decision by bank. This study fills the theoretical gap by looking at a different perspective, the decision to apply for loan among SMEs.

#### ***3.4.3.5 Dependent Variable***

The dependent variable in this model is the decision to apply for bank loan by owner/manager of SMEs. The question asked whether the application has been made to the or not, with the answer provided either 'yes' or 'no'. The use of binary data is according to study by Han et al. (2009a) where the dependent variable is coded as one if the respondent is discouraged from applying external financing and zero if otherwise.

This study also adopt study by Freel et al. (2012) where respondents are asked whether the business have applied bank loan for the past two years, and whether

the loan has been approved or not. This binary response is more conservative approach and may result in underestimation of the significance of discouragement. However this approach seems prudent to exploratory study (Freel et al., 2012).

Table 3.3  
*Definitions of Explanatory Variables*

Variables	Descriptions
Dependent Variable	=1 if the firm applied for loan for the last 3 years; = 0 if otherwise
Independent Variables:	
<u>Attributes of SMEs:</u>	
Size	Number of employees
Age	Number of years the firm was established
Legal Form	Categorical variable indicating the status of the business whether: (1) sole proprietor, (2) partnership, (3) private limited or limited liability company
Industry	Categorical variable indicating the nature of business whether (1) manufacturing, (2) retail/trading, (3) service provider or (4) others.
<u>Owner-Manager Profile</u>	
Ethnicity	Ethnicity of owner-manager whether (1) Malay, (2) Chinese, (3) Indian or (4) others.
Education	Indicates the level of education from: (1) SPM, (2) STPM/Certificate, (3) Diploma, (4) Degree, (5) Professional Qualification or (6) Master/PhD
Experience	Previous entrepreneurship experience in year
Gender	=0 if male; = 1 if female

Table 3.3 (Continued)

Variables	Descriptions
<u>Quality of Business</u>	
Accounting Information	Indicates the preparation of financial statements by professional; and whether they are audited or not
Innovativeness	Indicates the frequency of the engagement in research and development activities or produce/use of new product/services, ideas and method of operation.
Collateral	Indicates the availability of collateral, whether owned by business or the owner
<u>Relationship Banking</u>	
Length	Indicates the length and condition of relationship with current lender.
Multiple	Indicates whether the company deals with more than one bank.
<u>Application Costs</u>	
Financial	Indicate whether the company sought outside professional advice.
In-kind	Indicates whether the company deals and apply loan via online or conventional method.
Psychic	Indicates whether the management of company willing to share information with bankers and outside professional/consultant.
<u>Financing Alternatives</u>	Indicates whether the company obtains loan/grant from government agency, family and friends, illegal money lender or creditors.
<u>Political Connection</u>	Indicates whether the owner of the company is an active politician, the sales of the company / contract related to the government offices or agencies, and whether the company ever made any contribution during election campaign.

#### 3.4.4 Data Collection

This study carried out three-phase survey: pre-test, pilot test and actual survey. The questionnaire was pre-tested by five owners of businesses and three academicians. The purpose of the pre-test was to endorse the terms and items used in the

questionnaire and the appropriateness of the question for the respondents. The items, wordings and scales were then reviewed and amended accordingly, based on the comments from the respondents in the pre-test.

Subsequently, the questionnaires were sent for pilot study. The purpose of pilot study was to ensure that the questions in the questionnaire are understandable and respondents are able to answer. According to Johanson and Brooks (2010), a pilot study is recommended to estimate response rate and investigate the feasibility of a study, as well as to address issues like questionnaire having a clear and appropriate language, no obvious errors or omissions and at least adequate psychometric properties, ie. reliability and validity of the scales used. For this purpose, a pilot study was carried out in October 2011 among thirty (30) SME owners in the northern region of Kedah. The data gathered was analyzed using SPSS.

Table 3.4  
*Reliability test using SPSS- Pilot*

<b>Variables</b>	<b>N (valid)</b>	<b>N (exclude)</b>	<b>Cronbach's Alpha</b>
Accounting information	30	4	.312
Innovativeness	29	5	.760
Collateral	28	6	.821
Relationship (length)	28	6	.798
Relationship (multiple)	27	7	.862
Application cost	29	5	.734
Alternative financing	30	4	.28
Political connection	30	4	.775
Overall	26	8	.903

Table 3.4 above shows the results of reliability test using SPSS, on each of the variables that use likert scales. Most items for each of the construct are considered reliable as the Cronbach's Alpha is more than .7 (Sekaran, 2003) except for accounting information and alternative financing constructs. However, the Cronbach's Alpha for the whole model is .93, showing the acceptable reliability results.

In the actual survey, the collection of data was carried out through a structured questionnaire sent out to the owner or the manager of SMEs. There are three steps suggested for a normal survey, (i) initial mailing; (ii) first follow-up; and (iii) second follow-up (Dillman, 2000). Included in the mail package were cover letter, two sets of questionnaires (both in Bahasa Malaysia and English versions) and self-addressed envelopes.

#### **3.4.5 Sampling**

There are two methods of sampling, probability and nonprobability sampling. Probability sampling is when the elements in the population have a known chance of being chosen, it represents five basic techniques that are simple random sampling, systematic sampling, stratified random sampling, cluster sampling and double sampling (Sekaran & Bougie, 2010).

In contrast, in nonprobability sampling design, the elements in the population have no probability attached to their being chosen, and categories as convenience sampling and purposive sampling (Sekaran & Bougie, 2010). Included in the nonprobability sampling are quota sampling and snowball sampling (Zikmund, 2003).

The probability sampling is preferred (Zikmund, 2003) and findings from the nonprobability sampling cannot be confidently generalized to the population (Sekaran & Bougie, 2010). However, in some cases nonprobability sampling might be chosen for certain reasons. It is quick, convenient and less expensive as compared to probability sampling (Cooper & Schindler, 2003; Sekaran & Bougie, 2010; and Zikmund, 2003).

This study applies a simple random sampling by request to the SME Corp. An email was sent to the staff in-charged in Bahagian Teknologi Maklumat, SME Corp requesting for the list of SMEs registered with the corporation. Due to certain reason, the researcher finally received a list of 1,425 SMEs that was randomly selected by the SMECorp. The copies of related emails are shown in the Appendix. Thus, the sampling frame for this study includes the SMEs registered with SME Corp totaled 17,066 as in May 2011 and increased to 54,396 in January 2018.

The main objective of the study is to characterize or provide the profiles of the SMEs that are discouraged from applying for a bank loan. The target population in this study is defined as SMEs listed with SME Corp representing Central, Southern, Northern and East Coast regions in West Malaysia. SMEs from Sabah

and Sarawak were excluded due to different geographical state of affairs. SMEs from the entire population that needed additional capital are regarded as the sampling frame in this study.

To ensure the representation of SMEs in Malaysia, the samples include companies from various industries in Malaysia and from different ethnicity that is classified as Indigenous or Bumiputra and non-Indigenous or non-Bumiputra. This study also includes companies from different sizes and forms of business. The samples also must have been in operation for at least three years to fit the condition that the company did not apply for loan for the past three years.

Table 3.5  
*Companies Registered with SME Corp (15 May 2011)*

Sector	Malaysia		West Malaysia		East Malaysia	
	Number	%	Number	%	Number	%
Manufacturing	5,986	34.71	5,753	36.44	233	18.23
Manufacturing Related	1,483	8.79	1,366	8.65	117	9.15
Services						
Mining & Quarrying	38	0.22	33	0.21	5	0.39
Services (including ICT)	5,527	32.54	5,043	31.94	484	37.87
Constructions	1,627	9.58	1,404	8.89	223	17.45
Primary Agriculture	336	1.98	276	1.75	60	4.69
Others	2,069	12.18	1,913	12.12	156	12.21
TOTAL	17,066		15,788		1,278	

Source: [www.smeinfo.com.my](http://www.smeinfo.com.my)

The samples were extracted from the population list of SMEs registered with SME Corp through its website ([www.smeinfo.com.my](http://www.smeinfo.com.my)). The list also includes listed companies (Berhad) that fall within the definition of SMEs. However, those listed



companies were excluded from this study as they have adequate internally generated fund or alternative financing. As at 15 May 2011, there were a total of 17,066 number of companies registered with SME Corp in various sectors as shown in Table 3.5 above.

Due to the insignificant number of registered companies, Mining & Quarrying and Primary Agriculture sectors were excluded from the list. Also eliminated from the list are SMEs from Sabah and Sarawak due to reasons discussed in the earlier paragraph in this chapter.

Table 3.6  
*Companies Registered with SME Corp (January 2018)*

Sector	Malaysia		West Malaysia		East Malaysia	
	Number	%	Number	%	Number	%
Manufacturing	18,735	34.44	17,688	34.20	1,067	38.91
Manufacturing Related Services	1,790	3.29	1,700	3.29	90	3.28
Mining & Quarrying	no information available					
Services (including ICT)	12,733	23.41	11,994	23.22	739	26.95
Constructions	1,844	3.39	1,680	3.25	164	5.98
Primary Agriculture	407	0.75	381	0.74	26	0.95
Wholesale & retails	18,887	34.72	18,231	35.29	656	23.92
TOTAL	54,396		51,654		1,278	

Source: [www.smeinfo.com.my](http://www.smeinfo.com.my)

Later, as revealed in Table 3.6, the number of SMEs registered with SME Corp has increased tremendously, could be due to (1) increase in the number of business

newly formed; or/and (2) the rise of awareness among SMEs on the importance of being registered with SME Corp.

#### **3.4.6 Data Collection Procedures**

Data collection process began by obtaining the list of SMEs provided by SMECorp extracted from a simple random sampling. The list contains 1,425 SMEs. A set of questionnaires together with stamp-free self-addressed envelope were then distributed to all 1,425 firms representing all the four regions in December 2011. The four regions are Central (Selangor, federal territories of Kuala Lumpur and Putra Jaya); Southern (Negeri Sembilan, Melaka and Johor); Northern (Perlis, Kedah, Penang and Perak); and East Coast region (Kelantan, Terengganu and Pahang).

First reminder letters were sent three months later in March 2012. Simultaneously, initial emails inviting respondents to participate through online survey were also sent to the firms that have changed in address, indicated by retoured mails. Finally, the second reminder that includes cover letter, set of questionnaires and stamp-free self-addressed envelope were sent in May 2012 preceded with a phone call informing about the subject matter and the importance of their response to the current study. The whole process of data collection took about six months to complete. Figure 3.2 below shows the data collection process for the current study.

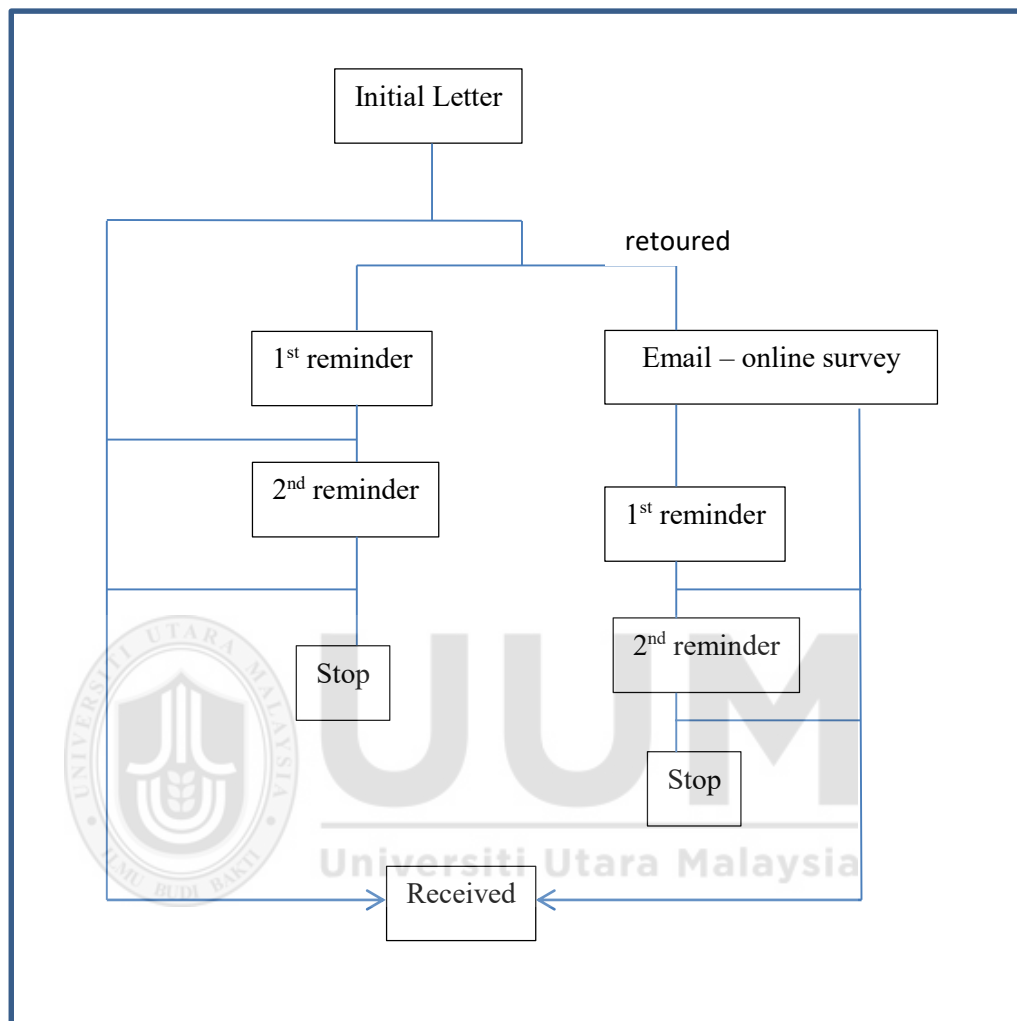


Figure 3.2  
*Data Collection Process*

Table 3.7 below shows the response received for the current study. A total of 87 firms responded within the two-month period before the first reminder. None of the respondents give any feedback after the first reminder. However, a total of 66 responses were received after the final reminder and phone call. Alas, the online survey only contributed nine responses after the first email and nil after the first and second reminder.

Table 3.7  
*Distribution of Respondents*

	<b>Mail</b>	<b>Online</b>
Initial letter / email	87	9
First reminder	-	-
Second reminder / final	66	-
<b>TOTAL</b>	<b>153</b>	<b>9</b>

Figure 3.3 below presents the flow of data collection with the detailed number of response and non-response. Response rate is considered by number of valid returns over the total sample after deducting the retoured and ineligible samples (Brennan, 1992). From the total 1,425 initial letter sent out, a total of 146 were retoured due to changes in addresses and could not be reached by email. Thus, the response rate could be calculated using the following formula, resulting in the rate of 12.67 percent.

$$\text{Response rate} = \frac{\text{Number of valid returns}}{\text{Total sample} - (\text{retoured} + \text{ineligibles})} \times 100\%$$

The response rate obtained in this study is acceptable as studies by Anuar and Yusuff (2011); Chong, Chong and Gan (2011); and Wong and Aspinwall (2005) among Malaysian SMEs using survey obtained response rates of 22.2 percent, 20 percent and 18 percent respectively. Low response rate among Malaysian SMEs is quite typical especially via mail. Further, Hashim (2007) in his study have mailed questionnaires to 1,000 SMEs received only 16 responses represent 1.6 percent where he finally decided to personally distributed the questionnaires.

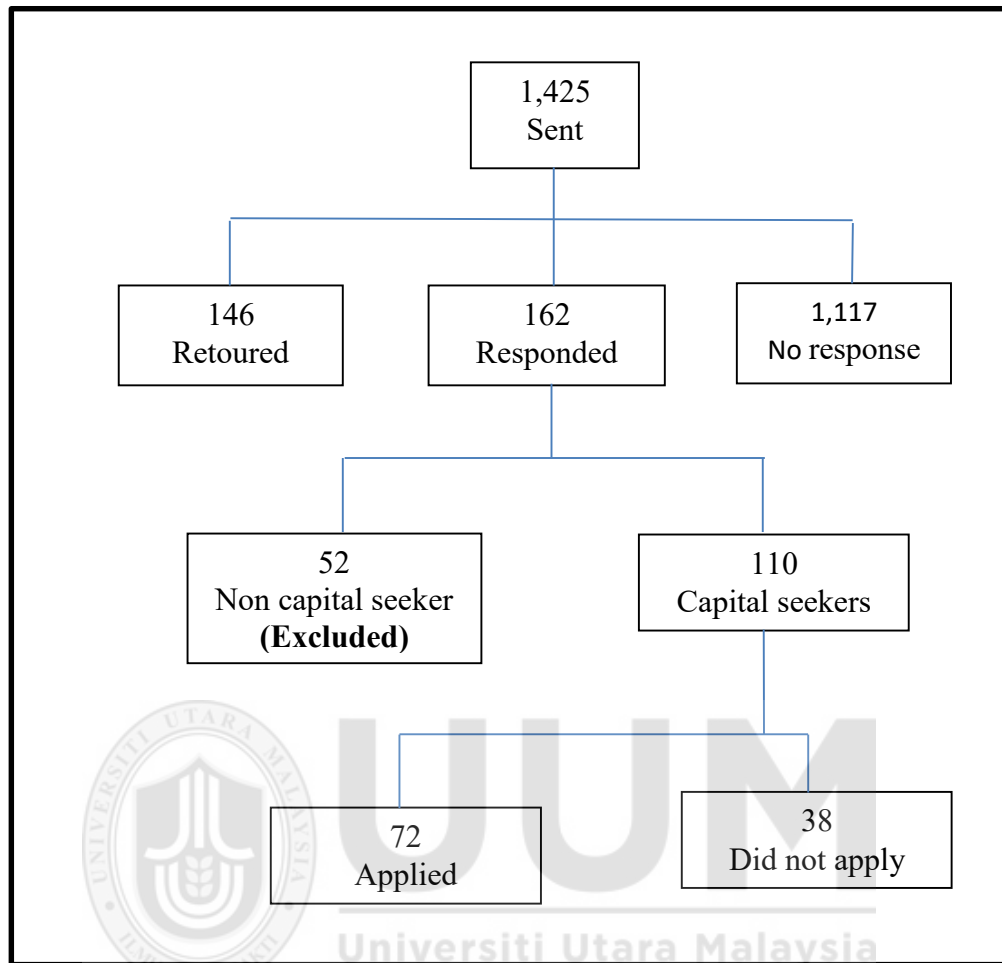


Figure 3.3  
Data Collection Flow

The data for analysis contains those that have made an application/s for loan to the banks ( $n=72$ ) and also those who did not ( $n=38$ ) for the past three years, i.e. three years before the survey (Cavalluzzo et al., 2002; Freel et al., 2012; Hill et al., 2006; and Vos et al., 2007). The three-year window for loan application is used to expand the categories of capital seekers that did not apply for bank loan, thus increasing the number of target group. The target group of 38 and non-target of 72 are obtained from a random sampling, represents a non-equal share samples and this is somehow reducing the probability of biasness and incorrect inferences. The

equal number of targets and non-targets is not a pure random sample and therefore lead to biasness and incorrect inferences (Palepu, 1986).

SMEs that did not apply for a bank loan were identified as non-capital seekers by the answer NO/NO for the first and second question in section A of the questionnaire. The questions are (1) Did your business need additional capital for the past three years?; and (2) Did your business apply for bank loan for the past three years? The data collection process for the current study witnessed the total of 52 respondents/firms so called non-capital seekers. The non-capital seekers are considered as hold-out samples and then excluded from this study, as they do not fall into the definition of discouraged borrowers. Respondents who answered YES/YES or YES/NO are considered as capital seekers. These ended up to only 110 responses that could be used in data analysis for current study.

### **3.5 Techniques of Data Analysis**

According to Sekaran and Bougie (2010) the data analysis has three objectives, getting a feel for the data; testing the goodness of the data; and testing the hypotheses developed for the research. This section presents the preparation of data in getting data ready for analysis, the testing of goodness of data using reliability and validity test and also the analysis used in testing the hypotheses.

The answered questionnaires received were checked immediately and the early or late response were then identified and written on top of the first page of the

questionnaire. Each questionnaire had an individual code according to the received date and entered into the SPSS for easy reference. Data keyed into the SPSS version 21 were then gone through the screening process to ensure the readiness of the data for analysis purpose.

### **3.5.1 Examination of Data**

Data screening process is important in order to ensure the cleanliness of data to a format most suitable for multivariate analysis (Hair, Black, Babin, Anderson, & Tatham, 2006). For this purpose, four tests were performed. They were missing data, response bias, outliers' identification and multicollinearity.

#### **3.5.1.1 Missing Data**

Missing data refers to valid values on one or more variables are not available for analysis (Hair et al., 2006). In dealing with missing data, Hair et al. (2006) lists out two options that are available. First, the questionnaire with missing data can be excluded in the study, if the sample size is adequate. However, if the exclusion of the questionnaire will cause inadequate sample size for statistical analysis, the second option may be done by applying remedies for missing data such as mean substitution method.

The evaluation of missing data found that a total of 19 out of 110 questionnaires had missing data as shown in Table 3.8 below. According to Hair et al. (2006) , if

the exclusion of the questionnaires with missing data will result in inadequate sample size for statistical analysis, remedies for missing data may be applied. Therefore, all the missing data in 19 questionnaires were treated using mean substitution method.

Table 3.8  
*Summary of Missing Data*

Number of missing data per case	Number of cases	Percent of samples
0	91	82.72
1	14	12.72
2	4	3.64
3		
4		
5		
6	1	.91
Total	110	100

### 3.5.1.2 Recoding

The wordings of several items in the questionnaire were negatively worded to help preventing the response bias. The statements in item (d) under attribute Quality of Business (Financial Statement), and items (g) and (h) under Relationship with the bank were negatively worded and need to be reversed before a total score can be calculated for these items. These items had undergone a “reversed-scored” treatment according to the steps outlined in (Pallant, 2010) so that the score is consistent with other positively-keyed in items. Similarly, during the statistical analysis, the dependent variables originally coded as 1=yes, 2=no were then recoded as 1=yes, 2=no.



### **3.5.1.3 Response Bias**

The purpose of performing response bias is to examine whether there is a significant difference between early and late response groups. The early response group was coded as 1 and the late response group was coded as 2 for this purpose. Responses received within two-months interval between first mail and first reminder was considered as early response group. On the other hand, the late response group was categorized for those response received after final reminder which was a month after the first reminder.

Chi-square tests and independent sample t-tests were applied to both groups. The chi-square test was conducted for categorical variables (demographic profiles) of respondents such as gender, age, ethnicity and education level. Independent sample t-tests were conducted on study variables. Significant values ( $p < 0.05$ ) for both tests indicate the existence of response bias while non-significant ( $p > 0.05$ ) values show vice versa (Pallant, 2010).

Initially, a total of 87 responses by mail plus 9 via online survey were received and categorized as early respondents, and 66 were received after the final reminder that considered as late respondents. The elimination process for the non-capital seekers witnessed the totals of 76 for early response group that coded as 1 and 34 late response group coded as 2.

Table 3.9

*Results of Chi-Square and t-tests for Response Bias between Early and Late Response Group (N=110)*

Categorical Variables	Response Groups		Chi-squared	Significant Level (2-tails)
	Early	Late		
Gender:			.002	.96
Male	54	24		
Female	22	10		
Ethnicity:			5.341	.15
Malay	55	18		
Chinese	14	11		
Indian	5	2		
Others	2	3		
Level of Education:			3.919	.56
SPM	8	3		
SPM/Certificate	5	4		
Diploma	12	6		
Degree	36	12		
Professional	6	6		
Masters / PhD	9	3		
Age:			2.158	.54
20-29 years	16	7		
30-39 years	8	7		
40-49 years	28	10		
50 and above	24	10		

Chi-square tests and independent sample t-tests were applied to both groups. The chi-square test was conducted for categorical variables (demographic profiles) of respondents such as gender, age, ethnicity and education level. Independent sample t-tests were conducted on study variables. Significant values ( $p < 0.05$ ) for both tests indicate the existence of response bias while non-significant ( $p > 0.05$ ) values show vice versa (Pallant, 2010).

The independent sample t-tests were conducted on all variables to examine whether the mean scores for early and late response groups were significantly different from one to another. The following Table 3.10 presents the results of the independent sample t-tests for both response groups:

Table 3.10  
*Results for Independent Sample -test*

<b>Variables</b>	<b>Sig. (2 tailed)</b>	<b>Std. Error Difference</b>
Financial Statement	.834	.628
Innovativeness	.538	.540
Collateral Availability	.575	.608
Relationship With Bank	.644	.642
Application Cost	.739	.397
Alternative Financing	.422	.565
Political Connection	.435	.610

The output of the t-tests above, the significant (2-tailed) values for all variables are above the cut-off of ( $>0.5$ ). This indicates that there is no statistically significant difference in the mean scores for all variables among early and late respondents (Pallant, 2010). Therefore, it can be rationally resolved that the two groups were from the same population.

#### **3.5.1.4 Outliers Identification**

An outlier is a value that lies outside the normal range of the data (Zikmund, 2003). It is an observation with a unique combination of characteristics identifiable as distinctly different from the other observations (Hair et al., 2006). Outliers are

cases with values well above or well below the majority of other cases (Pallant, 2010).

According to Tabachnick and Fidell (2007), there are four reasons for the presence of outliers. First is incorrect data entered; second is failure in specifying missing value codes in computer syntax, and therefore the missing value indicators were read as real data; third is that the outlier was not the member of the population; and fourth is that the case is from the population but the distribution for the variable in the population had more extreme values than a normal distribution.

This study involves more than two variables. Therefore means are needed to objectively measure the multidimensional position of each observation relative to some common point (Hair et al., 2006). The method to assess multivariate outliers is Mahalanobis distance ( $D^2$ ) that evaluates the position of each observation compared with the center of all observations on a set of variables. It is a generalized distance measure that accounts for the correlation among variables in a way that weights each variable equally (Hair et al., 2006). Hair, Black, Babin and Anderson (2010) highlighted the threshold levels for the  $D^2$  measure should be conservative (.005 or .001), resulting in values of 2.5 (small samples <80) versus 3 or 4 in a larger sample.

The probability computed for Mahalanobis  $D^2$  on 110 responses in this study, compared to the critical value determined by using a chi-square table. According

to the table, the critical value of 39 degree of freedom (the number of dependent variables) with the alpha value of .001 is 73.40. Since the maximum value of the output calculated (67.39), is lower than the critical value, it can be concluded that there is no multivariate outliers in the data file of this study.

#### ***3.5.1.5 Multicollinearity***

Multicollinearity refers to high correlations amongst two or more independent variables (Hair et al., 2010) which show the extent to which an independent variable can be explained by the other independent variables (Hair et al., 2006; and Sekaran & Bougie, 2010). According to Hair et al. (2010) bivariate correlations of .7 or higher may indicate the multicollinearity problem. Further, Tabachnick and Fidell (2007) suggested that the statistical problems created by multicollinearity occur at much higher correlations of .90 and higher. Therefore, results presented in Table 3.11 below signal the absence of multicollinearity problem among independent variables in this study.

Table 3.11  
Results of Pearson Correlations

	Size	Age	Legal Form	Industry	Ethnicity	Education	Experience	Gender	Accounting Info	Innovativeness	Collateral	Relationship	Application Cost
APPLY	.227*	.290**	.261**	-.250**	-.079	.051	-.048	-.002	.085	-.032	-.073	.127	.096
Size	1												
Age	.308**	1											
Legal Form	.231*	.347**	1										
Industry	-.082	-	-.351**	1									
Ethnicity	.003	.150	.144	.018	1								
Education	.106	.025	.103	-.068	.226*	1							
Experience	-.103	.353**	.007	.048	.151	.030	1						
Gender	-.163	-.167	-.138	.137	.216	.021	.055	1					
Accounting Info	.266**	.308**	.357**	.048	.243*	.122	.262**	-.092	1				
Innovativeness	.098	.129	-.043	-.083	-.041	.059	.063	-.168	-.017	1			
Collateral	-	-	-.326**	.168	-.005	-.107	-.176	.143	-.228**	-.254**	1		
Relationship	.292**	.311**										1	
Application Cost	-.091	-.220*	-.177	.108	.289**	.089	-.019	.228**	.007	-.313**	.221*	.176	1

\*Correlation is significant at the 0.05 level (2-tailed)

\*\*Correlation is significant at the 0.01 level (2-tailed)

Tolerance and VIF values of independent variables were also scrutinized to determine the presence of multicollinearity problem. Defined tolerance as the amount of variability of the selected independent variable not explained by other independent variables. VIF is calculated as the inverse of the tolerance value, a higher degree of multicollinearity is reflected in a lower tolerance value and higher VIF values. According to Hair et al. (2006) the common cut off threshold is a tolerance value of .10, which corresponds to a VIF value of 10.

Table 3.12  
*Tolerance and VIF Values of Independent Variables*

<b>Independent Variables</b>	<b>Collinearity Statistics</b>	
	<b><i>Tolerance</i></b>	<b>VIF</b>
Accounting information	.916	1.091
Innovativeness	.803	1.245
Collateral availability	.789	1.268
Relationship	.912	1.096
Application cost	.815	1.227
Alternative financing	.253	3.958
Political connection	.262	3.815

Table 3.12 above shows the tolerance and VIF value for each of independent variables. The results confirm that there is no serious multicollinearity problem between independent variables in this study. This is because the tolerance values for each independent variables are not less than .10 and supported by VIF values of below 10.0 (Hair et al., 2006; Pallant, 2010; and Sekaran & Bougie, 2010).

The purpose of this study is to predict future value of the dependent variable therefore multicollinearity is not a problem. This is because multicollinearity does not affect the reliability of the forecast (Sekaran & Bougie, 2010).

### **3.5.2 Testing Goodness of Data**

The goodness of data can be tested using reliability and validity. According to Hair et al. (2010) reliability is an assessment of the degree of consistency between multiple measurements of a variable, where validity is the extent to which a measure or set measures correctly represent the concept of study.

#### **3.5.2.1 Reliability**

The reliability of a measure is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the ‘goodness’ of a measure (Sekaran & Bougie, 2010). Reliability coefficient is one of the diagnostic measure that assesses the consistency of the entire scale with Cronbach’s Alpha (Hair et al., 2006). Cronbach’s alpha that computed in terms of the average inter-correlation among the items measuring the concept is a reliability coefficient that indicates how well the items positively correlated.





Generally, the reliabilities less than .60 are considered to be poor, those in the .70 ranged as acceptable and those over .80 are considered to be good (Sekaran & Bougie, 2010). According to Hair et al. (2010) .70 is the lower limit of Cronbach's alpha, although it may decrease to .60 in exploratory research.

Table 3.13  
*Results of Reliability Tests on Independent Variables*

<b>Variables</b>	<b>Cronbach's Alpha</b>	<b>No. of items</b>	<b>Cronbach's Alpha if item deleted</b>
Accounting Info	.877	4	
(a)			.820
(b)			.817
(c)			.852
(d)			.868
Innovativeness	.804	4	
(a)			.689
(b)			.736
(c)			.721
(d)			.817
Collateral Availability	.701	4	
(a)			.529
(b)			.635
(c)			.739
(d)			.610
Relationship With Bank	.540	8	
(a)			.361
(b)			.559
(c)			.388
(d)			.357
(e)			.356
(f)			.414
(g)			.409
(h)			.311
Application Cost	.786	6	
(a)			.720
(b)			.724
(c)			.746
(d)			.718
(e)			.872
(f)			.725

Table 3.13 (Continued)

<b>Variables</b>	<b>Cronbach's Alpha</b>	<b>No. of items</b>	<b>Cronbach's Alpha if item deleted</b>
Alternative Financing	.216	4	
(a)			.187
(b)			.090
(c)			-.016
(d)			.285
Political Connection	.207	4	
(a)			-.049
(b)			.235
(c)			.043
(d)			.285

Table 3.13 above shows the results of reliability test on all items for seven constructs. The results suggest that items (b) and (f) for Relationship and item (e) of Application Cost be removed from the constructs. Whereas, the cronbach's alpha results of the last two constructs, ie. Alternative Financing and Political Connection suggests that the whole construct being removed from the model. Table 3.14 below shows the results of reliability test on all constructs after deleting the suggested items.

Table 3.14  
*Cronbach's Alpha after Deleting Items*

<b>Variables</b>	<b>Cronbach's Alpha</b>
Accounting information	.877
Innovativeness	.804
Collateral	.701
Relationship	.755
Application cost	.878

Table 3.15 below shows the comparison on Cronbach's Alpha coefficient tested on the real data and pilot study. The Cronbach's alpha coefficient for accounting information variable has shown an improvement from .312 during the pilot test and .877 using the real data, indicates a better internal consistency of the items in the scale. On the other hand, the political connection variable demonstrates a drop in reliability coefficient and therefore this variable is released from this model. The rest of the variables establish a good indication a good inter correlation among items in each construct.

Table 3.15  
*Cronbach's Alpha: Comparing Pilot and Real Data*

Variables	Real Data	Pilot Study
Accounting information	.877	.312
Innovativeness	.804	.760
Collateral	.701	.821
Relationship	.755	.798
Application cost	.878	.734
Alternative financing	.216	.280
Political connection	.207	.775

### 3.5.2.2 Validity

According to Hair et al. (2006) construct validity is the extent to which a set of measured items actually reflects the theoretical latent construct those items are designed to measure. It is about the accuracy of measurement and provides confidence that the item measures taken from a true score in a right population.

Factorial validity can be established by performing data analysis. It provides the tools for analysing the structure of interrelationship among large number of variables by defining a set of variables that are highly correlated, known as factors (Hair et al., 2010). The results of factor analysis will confirm whether or not the theorized dimensions emerged (Sekaran & Bougie, 2010).

According to Hair et al. (2006) the minimum absolute sample size to perform factor analysis is 50 observations and preferably the sample size should be 100 or larger. Since the sample of this study is 110, it therefore meets the sample requirement to apply factor analysis.

The constructs in the model are grouped into two, the quality of the business which includes the financial statement, the innovativeness and the availability of the collateral. The second group is called extrinsic value that includes the relationship of the business with the bank and the application cost which related to the bank loan.

The KMO (Kaiser-Meyer-Olkin) values that intended to measure of how suited the data is for factor analysis, for both groups are .711 and .756 respectively. These values exceed .6 and therefore reached statistical significance and supporting the factorability of the correlation matrix (Pallant, 2010). The following Table 3.16 presents the pattern matrix for Principal Component Analysis with Oblimin rotation method.

Table 3.16

*Pattern Matrix for PCA with Oblimin Rotation of Five Factor Items*

Items	Pattern Coefficients					Communalities
	Comp 1	Comp 2	Comp 3	Comp 4	Comp 5	
Factor Loading	3.397	2.770	1.705	3.766	2.450	
AccInfo b	.912					.790
AccInfo a	.878					.811
AccInfo d	.814					.708
AccInfo c	.804					.674
Inno a		.871				.749
Inno c		.814				.662
Inno b		.773				.680
Inno d		.700				.470
Coll a			.869			.772
Coll d			.826			.590
Coll b			.784			.301
Coll c			.451			.665
AC d				.880		.678
AC f				.845		.664
AC b				.826		.582
AC a				.767		.769
AC c				.750		.708
Rel c					.744	.556
Rel a					.706	.558
Rel e					.700	.511
Rel d					.699	.496
Rel h					.675	.244
Rel g					.476	.448

External validity refers to the ability of research findings be used to generalize to and across different measures, persons, settings and times (Calder, Phillips, & Tybout, 1982), either from a sample to a larger population or to settings and population other than those studied (Lucas, 2003). According to Calder, Phillips & Tybout (1983), when the objective of a research is to test a theory, the concept of external validity is comparatively less important than other forms of validity. The main objective of this study is profiling the discouraged borrowers among Malaysian SMEs, simultaneously adding to the body of knowledge on the Theory of Discouraged Borrowers, thus the external validity seems to be important.

External validity is defined as generalizing from a sample to a larger population, thus it is viewed as sampling issue. Ensuring representativeness in the sample is one of the points in researchers enhancing the external validity (Ferguson, 2004). Lucas (2003) lists five criteria that can be used to assess the external validity of the test, they are (1) construct validity; (2) relevance; (3) reproducibility; (4) consistency; and (5) confirmatory status. Thus, this study is believed to have at least a moderate external validity with the application of appropriate sampling frame and observes all the criteria above.

### **3.5.3 Improved Model**

The results from reliability and validity tests above, suggest that two constructs, alternative financing and political connection be dropped from the model as they showed reliabilities less than .60. Understanding that reliability is an assessment of the degree of consistency between multiple measurements of a variable, where

validity is the extent to which a measure or set measures correctly represent the concept of study (Hair et al., 2006), the new modified model is presented below.

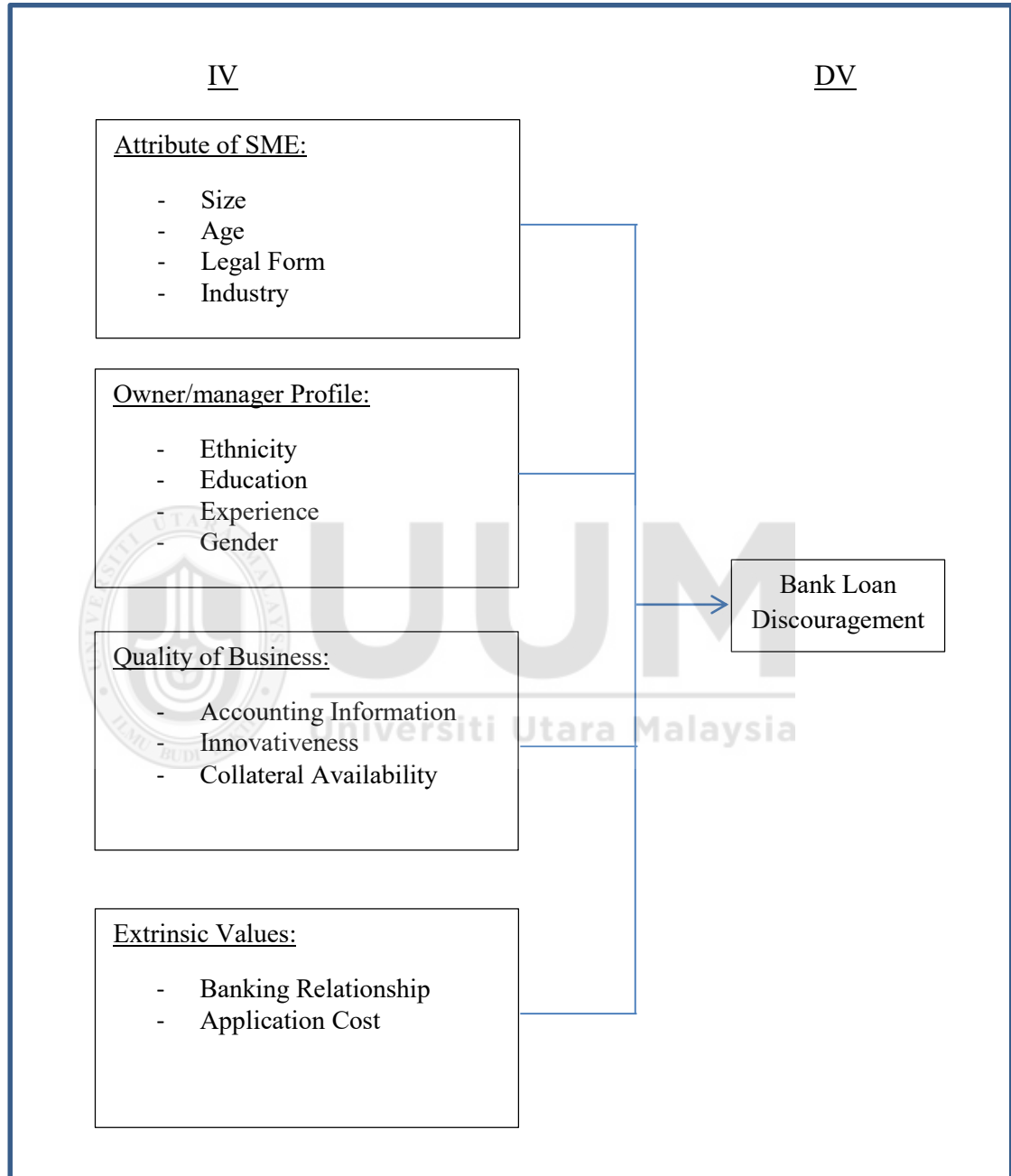


Figure 3.4  
*The Modified Model of Discouraged Borrowers*

Thus, hypothesis H14 and H15 were also dropped and not to be tested. Table 3.17 below shows a summary of hypotheses after the modification on the model.

Table 3.17

*Summary of Hypotheses after the Modification on the Model*

<b>Hypotheses</b>	
H1:	The size of the firm is positively (negatively) related to the bank loan application (discouragement) among SMEs.
H2:	The age of the firm is positively (negatively) related to the bank loan application (discouragement) among SMEs.
H3:	Sendirian Berhad firm is positively (negatively) related to the bank loan application (discouragement) among SMEs.
H4:	Type of industry is negatively (positively) related to the bank loan application (discouragement) among SMEs.
H5:	The ethnicity of the owner-manager of the firm is negatively (positively) related to the bank loan application (discouragement) among SMEs
H6:	The educational background of the owner-manager of the firm is positively (negatively) related to the bank loan application (discouragement) among SMEs.
H7:	The experience of the owner/manager of the firm is positively (negatively) related to the bank loan application (discouragement) among SMEs
H8:	The female SME owner or managers is negatively (positively) related to the application (discouragement) for bank loan among SMEs.
H9:	SMEs with accounting information being compiled, reviewed and/or audited by a professional accountant are positively (negatively) related to the bank loan application (discouragement) among SMEs.
H10:	Innovativeness of the SMEs is positively (negatively) related to the bank loan application (discouragement) among SMEs.
H11:	The availability of collateral is positively (negatively) related to the bank loan application (discouragement) among SMEs.
H12:	SMEs with a good relationship with a bank are positively (negatively) related to the bank loan application (discouragement) among SMEs.
H13:	The application cost is positively (negatively) related to the bank loan application (discouragement) among SMEs.



### **3.5.4 Testing the Hypotheses**

The model of this research presents the binary dependent variable with values of 1 (applied for bank loan) and 0 (not applied). Logistic regression is used when the dependent variable is nonmetric (Sekaran & Bougie, 2010). Logistic regression approaches the task of calculation of cutting scores and the assignment of observations to groups in a manner more similar to that found in multiple regression (Hair et al., 2006).

In order to test hypotheses developed in this research, descriptive analysis and logistic regression analysis were used. The data that has gone through the cleaning and goodness tests were keyed-in and tested using Stata SE version 13. The results of descriptive and regression analyses are presented and discussed in the following chapter.

### **3.6 Summary of the Chapter**

This study aims to characterize the discouraged borrowers among Malaysian SMEs toward bank loans. It also attempts to distinguish from previous studies by focusing on the demand side of the bank loan. This study is also expected to extend the Theory of Discouraged Borrowers by applying different methods of measurement inspired by previous studies that have been carried out in western countries and China. The sample of this study also includes micro enterprises as

per the definition of the SMEs. Thus, it might represent the entire 99 percent of business establishments in Malaysia. Finally, the result from this study is expected to shed light on the financing obstacle issues among Malaysian SMEs.



## **CHAPTER FOUR**

### **RESULTS AND DISCUSSION**

#### **4.1 Introduction**

The previous chapter presents the development of hypotheses, research design and techniques of data analysis carried out in this research. In relation to the above, this chapter presents the profiles of respondent, the descriptive analysis on the respondents and the results from the logistic regression analysis and finally discusses the results in relation to previous studies.

#### **4.2 Profile of Respondents**

This section reveals the profiles of 110 SMEs and their owner manager that responded to questionnaires distributed. The profile details out the information on the need for capital and the decision to apply for bank loan, their location<sup>2</sup>, legal status, the nature of operation, size and age of the business.

---

<sup>2</sup> Information on the location of respondents are derived from the list of names and registered addresses provided by SME Corp from their database.

#### 4.2.1 Profile of SMEs

Table 4.1 below witnesses that 35 percent (38 companies) of respondents considered as capital seekers did not apply for bank loan in the past three years prior to the data collection date. On the other hand, 72 companies (65 percent) decided to apply for bank loan to fulfill their financing desired.

Respondents in this study represent all regions in West Malaysia. They were 39 companies (35.5 percent) from Central Region, 31 companies (28.2 percent) from Northern Region, 23 companies (20.9 percent) from Southern Region and 17 companies (15.5 percent) from East Coast.

Table 4.1  
*Profiles of SMEs*

	<b>Total N=110</b>	<b>Applied N=72</b>	<b>Discouraged N=38</b>
Location: Central	39	25	14
Northern	31	18	13
Southern	23	16	7
East Coast	17	13	4
Legal Status: Sole Proprietor	20	9	11
Partnership	13	6	7
Private Limited	77	57	20
Nature of Operation:			
Manufacturing	35	28	7
Manufacturing Related Service	5	3	2
Trading and Services	54	31	23
Constructions	16	10	6
Age: Less than 10 years	25	11	14
Between 10 and 20 years	64	20	44
More than 20 years	21	17	4

Table 4.1 above disclose that 39 of the respondents are from central region, 31 from northern region, 23 from southern and seventeen SMEs from east coast region. The above table also reveals that 77 (70.0 percent) respondents are private limited companies. This is followed by 20 SMEs in the category of sole proprietor (18.2 percent) and 13 partnerships (11.8 percent). From the above table, it is clear that the majority of SMEs that applied for bank loan are from private limited (Sendirian Berhad) that is 57 SMEs as compared to nine and six SMEs from sole proprietor and partnership respectively. In terms of the nature of operation, 40 SMEs are from manufacturing and manufacturing service related which represent 36 percent from total respondents. 54 companies (49 percent) are from trading and services and 16 SMEs from construction.

In terms of age, 25 SMEs represent the age of less than ten years and of this only eleven SMEs that applied for loan. Majority of respondents which is 64 (58 percent) are among ten to twenty-year old. The above table also reveals that only 20 SMEs of this age that applied for bank loan. On the other hand, twenty-one SMEs represent a group of age more than twenty years disclose that the majority of them applied for bank loan (17 SMEs).

#### **4.2.2 Profile of Owner/manager**

Table 4.2 below presents the profiles of respondents among owner/manager of SMEs. A total of 17 respondents (15.5 percent) are the owner of the business where 12 applied for bank loan and five did not apply. 30 respondents (27.3

percent) are among the manager of the business, 21 applied and 9 respondents did not apply for bank loan. Majority of the respondents, 63 respondents (57.3 percent) are owners and manage the business on their own where 39 decided to apply for bank loan and not to apply; 17 are owner and did not manage the business where 12 applied for bank loan and five not. The rest of the respondents, 30 only manage the business where 21 decided to apply for bank loan and nine did not. Further, 32 respondents (29.1 percent) are females 21 did not apply for bank loan and majority of the respondents are male, i.e. 70.9 percent (78 respondents) where 51 of them did apply for bank loan and 27 did not.

Table 4.2 also shows that 28 respondents (25.5 percent) have less than ten years working experience, 19 applied and 9 did not apply for bank loan; majority of 70 respondents (63.6 percent) with between ten to twenty years of experience where 47 did apply for bank loan and 23 did not, and 12 respondents (10.9 percent) are with more than twenty years of working experience, six of them did apply for bank loan and another six did not. Further, 100 respondents (90.0 percent) claimed to have experience that are related to the current job where 66 decided to apply for bank loan and 44 did not. Only ten respondents (9.2 percent) have no experience in managing and handling business, six of them did apply for bank loan and four did not.

Ethnicity background among respondents shows that 73 are Malays (66.4 percent) where 50 decided to apply for bank loan and 23 did not. 25 are Chinese (22.7 percent) eight of them did not apply for bank loan and 17 did. seven Indians (6.4 percent) where all of them decided not to apply for bank loan and five (4.5 percent) from

other races and all of them did apply for bank loan. In terms of educational background, majority i.e. 60 of the respondents (54.5 percent) are among degree holders or having professional qualifications. This is followed by 20 respondents with SPM and STPM (18.2 percent), 18 respondents (16.4 percent) among Diploma holders and 12 post graduates representing 10.9 percent of total respondents.

Table 4.2  
*Profile of Owner/manager*

	<b>Total N=110</b>	<b>Applied N=72</b>	<b>Discouraged N=38</b>
Owner or Manager: Owner	17	12	5
Manager	30	21	9
Owner & Manager	63	39	24
Gender: Female	32	11	21
Male	78	51	27
Experience: Less than 10 years	28	19	9
Between 10 and 20 years	70	47	23
More than 20 years	12	6	6
Related Experience: Yes	100	66	34
No	10	6	4
Race: Malay	73	50	23
Chinese	25	17	8
Indian	7	0	7
Others	5	5	0
Education: SPM/STPM	20	10	10
Diploma	18	12	6
Degree/Professional	60	46	14
Post-Graduate	12	4	8
Age: Between 10 to 29 years	23	16	7
Between 30 and 39 years	15	10	5
Between 40 and 49 years	38	24	14
Above 50 years	34	22	12

The above table also shows that there are 23 respondents (20.9 percent) aged between ten to twenty-nine years old, where seven of them did not apply for bank loan and 16 did; 15 respondents (13.6 percent) aged between thirty to thirty-nine years old, where ten of them did apply for bank loan and five did not; majority 38 respondents (34.5 percent) aged between forty to forty-nine years old, 14 of them did not apply for bank loan and 24 did; and 34 respondents (30.9 percent) are above fifty years old where 22 of them decided to apply for bank loan and 12 did not.

### 4.3 Descriptive Analysis

This section presents descriptive analysis of each independent variables based on mean, standard deviation, minimum and maximum for the total of 110 respondents.

Table 4.3  
*Descriptive statistics – Accounting Information*

Items	N	Min	Max	Mean	Std dev
The business's financial statement is prepared by qualified accounting staff (Member of Malaysian Institute of Accountant).	110	1	4	2.45	1.252
The business's financial statement is prepared by external accountant engaged by the company.	110	1	4	2.73	1.327
The business's financial statement is audited.	110	1	4	3.05	1.061
The business does not engage any internal or external accountant.	110	1	4	3.14	1.053



The first dimension in the quality of business is the preparation of financial statements. The financial statements preparation not involving qualified accountant has the highest mean of 3.14 and the lowest mean is financial statements prepared by internal qualified accounting staff with mean of 2.45, with also the highest variability with a standard deviation of 1.252.

Table 4.4  
*Descriptive statistics - Innovativeness*

Items	N	Min	Max	Mean	Std dev
Frequently tries out new ideas	110	1	4	3.07	.809
Seeks out new ways to do things	110	1	4	3.03	.760
Creative in its methods of operation.	110	1	4	3.07	.738
The first to market with new products and services.	110	1	4	2.55	.982

Innovativeness of the company is the second dimension of quality of business used in this study. The testing of new ideas, seeking out new ways to do things and using creative methods of operation have more or less the same mean. The first to market new product scores the lowest mean of 2.55 with the highest standard deviation of .982.

The availability of collateral is the third dimension in the quality of SME in the model of this study. Overall the means are quite similar ranging between 2.15 to 2.59 with owners using personal assets as collateral has a highest standard deviation of .988 as shown in Table 4.5.

Table 4.5

*Descriptive statistics – Availability of collateral*

Items	N	Min	Max	Mean	Std dev
The business has sufficient assets to be used as collateral to the bank.	110	1	4	2.15	.927
The business uses its OWN assets as collateral to the bank.	110	1	4	2.23	.984
The business uses its OWNER'S personal assets as collateral to the bank.	110	1	4	2.59	.988
The business has NO problem in providing collateral for bank loan purposes.	110	1	4	2.15	.937

The first dimension in the extrinsic values in the model is relationship with the bank. No intention to change, applied to the same bank they currently maintain saving or current account, and applied to different banks and pick up the best offer have quite similar means score with maintaining the same bank has the highest standard deviation of .914. SME becoming the regular customer to the bank has the lowest mean and standard deviation of .554.

Table 4.6

*Descriptive statistics – Relationship with the bank*

Items	N	Min	Max	Mean	Std dev
The business maintains a continuous and good relationship with current bank.	110	1	4	1.64	.631
The business is considered a regular customer to the bank.	110	1	3	1.52	.554
The business has no intention to change to other bank.	110	1	4	2.09	.796
The business maintains accounts and apply loan from the same bank.	110	1	4	2.09	.914
The business always searches out for best loan offer from few banks before submitting loan application to only one bank.	110	1	4	1.81	.893
The business submits loan application form to a few banks and accepts the best offer.	110	1	4	2.08	.890

As for the application cost, SMEs engaging professional consultant during the process of applying bank loan has the highest mean of 2.97 and the highest standard deviation of .974.

Table 4.7

*Descriptive statistics – Application costs*

Items	N	Min	Max	Mean	Std dev
The business sought professional advice before applying for loan.	110	1	4	2.54	.972
The business engaged professional consultant in preparing documents for loan application purpose.	110	1	4	2.97	.974
The business spends more time for meeting with bank officer before submitting the application for bank loan.	110	1	4	2.49	.831
The business prefers to deal with bank officer and submit application form via online.	110	1	4	2.45	.761
The business is willing to share information that is deemed confidential with the bank.	110	1	4	2.46	.774

The following Table 4.8 displays the overall descriptive statistics for all items in the design of this study. The first five measures that have a high mean score are from the quality measure of the SMEs. They are no qualified accountant involve in the preparation of financial statements, new ideas, creative methods, accounts being audited and new ways of business operating.

Table 4.8  
*Summary of descriptive statistics – all items*

Items	Min	Max	Mean	Std dev
The business does not engage any internal or external accountant.	1	4	3.14	1.053
Frequently tries out new ideas	1	4	3.07	.809
Creative in its methods of operation.	1	4	3.07	.738
The business's financial statement is audited.	1	4	3.05	1.061
Seeks out new ways to do things	1	4	3.03	.760
The business's financial statement is prepared by qualified accounting staff (Member of Malaysian Institute of Accountant).	1	4	2.97	.974
The business's financial statement is prepared by external accountant engaged by the company.	1	4	2.73	1.327
The business uses its OWNER'S personal assets as collateral to the bank.	1	4	2.59	.988
The first to market with new products and services.	1	4	2.55	.982
The business sought professional advice before applying for loan.	1	4	2.54	.972
The business spends more time for meeting with bank officer before submitting the application for bank loan.	1	4	2.49	.831
The business is willing to share information that is deemed confidential with the bank.	1	4	2.46	.774
The business prefers to deal with bank officer and submit application form via online.	1	4	2.45	.761
The business uses its OWN assets as collateral to the bank.	1	4	2.23	.984
The business has sufficient assets to be used as collateral to the bank.	1	4	2.15	.927
The business has NO problem in providing collateral for bank loan purposes.	1	4	2.15	.937

Table 4.8 (Continued)

Items	Min	Max	Mean	Std dev
The business has no intention to change to other bank.	1	4	2.09	.796
The business maintains accounts and apply loan from the same bank.	1	4	2.09	.914
The business always searches out for best loan offer from few banks before submitting loan application to only one bank.	1	4	2.08	.890
The business submits loan application form to a few banks and accepts the best offer.	1	4	1.81	.893
The business maintains a continuous and good relationship with current bank.	1	4	1.64	.631
The business is considered a regular customer to the bank.	1	3	1.52	.554

#### 4.4 Regression Analysis

This section discusses the results of regression analyses executed to test the model of this study.

##### 4.4.1 Logistic Regression

Table 4.9 displays the results of direct logistic regression performed for all variables involved in this study. Logistic regression and regression analysis are very alike from practical point of view, although they are very different in statistical viewpoint (Sekaran & Bougie, 2010). Among the assumptions in the logistic regression, a linear relationship between continuous predictors and the logit transform of the dependent variable, although with the absence of

assumptions about linear relationships among predictors themselves (Tabachnick & Fidell, 2007). Further, the absence of multicollinearity and outliers in the solution are also part of the assumptions or limitations of the logistic regression technique (Tabachnick & Fidell, 2007) and these were discussed in earlier chapter. The model in this study consists of thirteen independent variables (size, age, legal form, industry, ethnicity, experience, gender, education, accounting information, innovativeness, collateral, relationship and application cost) and the decision whether to apply or not for the bank loan as dependent variable.



Table 4.9

*Logistic regression predicting likelihood of the business applying for bank loan*

Independent Variables	Coefficient	Predicted Sign	Odds Ratio	S.E	z	p> z	95% C.I	
							Lower	Upper
Size	.9744	+	2.649	1.2042	2.14	.032**	.0831	1.8651
Age	.1725	+	1.188	.0738	2.78	.005**	.0508	.2943
Legal Form	.3908	+	1.478	.5718	1.01	.313	-.3681	1.1489
Industry	-.2565	-	.774	.1535	-1.29	.196	-.6447	.1325
Ethnicity	-.9981	-	.369	.1452	-2.53	.011**	-1.7702	-.2261
Education	.0487	+	1.050	.2013	.25	.799	-.3267	.4243
Experience	-.1379	+	.871	.0531	-2.26	.024**	-.2574	-.0185
Gender	-1.0202	-	.361	.2170	-1.70	.090*	-2.1987	.1594
Accounting Info	-.0045	-	.996	.2884	-.02	.988	-.5714	.5634
Innovativeness	.0804	+	1.083	.4418	.20	.844	-.7195	.8794
Collateral Availability	.5372	+	1.711	.7180	1.28	.201	-.2858	1.3595
Relationship With Bank	.4007	+	1.491	.7874	.76	.448	-.6353	1.4344
Application Cost	1.1889	+	3.282	1.4764	2.64	.008**	.3070	2.0702
Constant	-8.2791		.000	.0010	-2.22	.027	-15.5982	-.9545

n= 110

LR  $\chi^2 = 39.80$ Prob >  $\chi^2 = 0.0001$ Pseudo  $R^2 = 0.2806$ 

\* significant at the 0.1 level (one-tail)

\*\*significant at the 0.05 level (2-tail)

Note: The dependent variable in this analysis is the business coded so that 0 = did not apply for bank loan and 1 = applied for bank loan.



The results indicate that the size of the business has a positive relationship (OR=2.649) with the bank loan application ( $p<.05$ ). The age of the business also has strong correlation (OR=1.188) with the decision on bank loan application ( $p<.05$ ). Gender has a significant influence (OR=.361) on the bank loan application ( $p<.1$ ). The experience in handling businesses among owner/manager also has a strong correlation (OR=.871) with the decision on bank loan application ( $p<.05$ ). The ethnicity of the owner/manager of the business has a significant influence (OR=.369) on the bank loan application ( $p<.05$ ). Finally, the application cost has a significant influence (OR=3.282) on the bank loan application ( $p<.05$ ). Generally, the size, age and application cost have a stronger relationship (OR>1) as compared to gender, experience and ethnicity (OR<1).



Table 4.10

*Logistic regression predicting likelihood of the business applying for bank loan with robust SE*

Independent Variables	Coefficient	Predicted Sign	Odds Ratio	Robust S.E	z	p> z	95% C.I	
							Lower	Upper
Size	.9744	+	2.649	1.2039	2.14	.032**	1.0868	6.4557
Age	.1725	+	1.188	.0650	3.15	.002**	1.0676	1.3228
Legal Form	.3908	+	1.478	.5619	1.03	.304	.7011	3.1137
Industry	-.2565	-	.774	.1591	-1.25	.212	.5174	1.1581
Ethnicity	-.9982	-	.369	.1244	-2.96	.003**	.1902	.7143
Education	.0487	+	1.050	.1989	.26	.797	.7243	1.5221
Experience	-.1379	+	.871	.0566	-2.12	.034**	.7670	.9894
Gender	-1.0202	-	.361	.2226	-1.65	.098*	.1076	1.2089
Accounting Info	-.0045	-	.996	.3203	-.01	.989	.5304	1.8705
Innovativeness	.0805	+	1.083	.4085	.21	.831	.5172	2.2686
Collateral Availability	.5372	+	1.711	.7277	1.26	.207	.7431	3.9377
Relationship With Bank	.4007	+	1.491	.6919	.86	.388	.6006	3.7026
Application Cost	1.1189	-	3.282	1.4146	2.76	.006**	1.4104	7.6388
Constant	-8.2971		.000	.0009	-2.45	.014	.0000	.1946

n= 110

Prob > chi<sup>2</sup> = 0.0066Pseudo R<sup>2</sup> = 0.2807

\* significant at the 0.1 level (one-tail)

\*\*significant at the 0.05 level (2-tail)

This study applied the robust option in estimating standard errors using Huber-White sandwich estimators in Stata V13. With the robust option as shown in Table 4.10 above, the p-values of the independent variables have improved with a slight different. The variables are age (.002), ethnicity (.003) and application cost (.006). The similar results with robust option and odds ratio above proves that the observations are trustworthy.

## **4.5 Discussion of the Results**

This section discusses the results from analysis carried out in previous section. The explanations of the results are based on prior literature discussed in Chapter Two.

### **4.5.1 Hypothesis 1: Size of the SMEs**

The size of the firm, as measured in this study by the total assets owned, found to be statistically positively significant with the decision by owner/manager of Malaysian SMEs on bank loan application. Therefore, H1 on the relationship between size of the firm and the decision to apply for bank loan is supported.

This is a prove that the size of the firm has an impact on the decision making by the owner/managers of Malaysian SMEs on whether to apply for bank loan or not. The owner of larger firm seems to have better perception on having their loan application being approved by banks. These findings agree with the conclusions

made by Chakravarty and Xiang (2013); Freel et al. (2012); Levenson and Willard (2000); and Storey (2004) that the size of the business positively influences the application rate for bank loans.

The results of this study also agree with findings by Canton et al. (2013) that the smallest firms are the worst perception in the process of accessing loan. Further, firms also have a tendency to use outside financing as they grow larger due to the higher need to finance their growth and also the increase in their confidence in their loan application being approved by the bank. This is also in line with (Berger et al., 2001; and Xiang et al., 2014) that the larger the firm, the more likely it is to apply for outside financing.

The finding of this study suggests that the smaller the firm, the more likely it is to be discouraged from applying for bank loan. The size of the firm in this study refers to the total assets of the firm. Thus it is possible that the owner with a minimal value of assets owned that can be offered as collateral to the bank may perceived that the chances of being granted a loan by the bank is very low. This will lead them away from seeking for financing aid from the bank.

#### **4.5.2 Hypothesis 2: The age of the SMEs**

The age of the firm proved to be positively significant with the decision by the owner/manager of Malaysian SMEs on bank loan application. Therefore, H2 on

the relationship between the age of the firm and the decision whether to apply for bank loan or not among owner/manager of Malaysian SMEs is supported.

Firms need more financing either for their expansion or other operational costs. The age of the firms also reflects the experience of the firms. The longer the firms stay in the business, the more experienced and efficient they are. The results of this study agree with Berger and Udell (1990) where inexperienced firms tend to borrow less than experienced firms. Older firms have a tendency to apply more loans due to the less riskier and higher growth opportunity (Ismail & Razak, 2003) and more established compared to younger firms (Hyytinen & Pajarinen, 2008). This finding is consistent with Canton et al. (2013) that the youngest firms are the worst perception in the process of accessing loan. This study also reaches an agreement with Han et al. (2009b) who revealed that discouraged borrowers are younger and less experienced. Table 4.11 below reveals the means of age variable for the whole sample frame.

Table 4.11  
*Mean of Variable – Age of the SMEs*

<b>Variable</b>	<b>All sample N=110</b>	<b>Applicants N=72</b>	<b>Discouraged N=38</b>
Business age	15.02	16.76	11.68

The findings of this study provide evidence that SMEs become more established as they stay longer in the business. Being a long-existence player in the industry will increase the confidence and therefore reduce the feeling of being rejected by

the bank. Further, the long-existence in the industry also expands the networking with other players and bankers as well, thus eliminate the discouragement related to application for bank loan.

#### **4.5.3 Hypothesis 3: Legal Form of the Business**

The legal form of the business in this study found to be not significantly related to the discouragement in bank loan applications among SMEs in Malaysia. This results fails to agree with the previous studies that single owners decrease the probability of applying for loan (Blumberg & Letterie, 2007; and Machauer & Weber, 1998). The result of this study also does not support neither results revealed by Han et al. (2009a) that loan application are more likely from limited liability SMEs, nor studies by Cowling and Mitchell (2003); and Freel et al. (2012) that there is a positive link between limited liability and discouragement in bank loan applications.

This study indicates that the form of business has no effect on the discouragement on Malaysian SMEs in applying for bank loan.

#### **4.5.4 Hypothesis 4: Type of industry**

The results of this study found there is no significant difference between type of industry and the discouragement in loan application. Therefore, the hypothesis 4 on the relationship between type of industry and the application for bank loan among Malaysian SMEs is not supported. This result does not conform to the previous findings by Freel et al. (2012) that knowledge-intensive service firms are more likely to be discouraged from applying for bank loan as compared to manufacturing firms (Craig et al., 2007).

The results of this study suggest that the type of industry is not a factor to the discouragement among Malaysian SMEs in seeking for loan from banks which differ from previous studies. The contradiction could due to the different in data set. This study is based on five groups. They are manufacturing (31.8 percent) that coded as 1, manufacturing related services (4.5 percent) coded as 2, services (33.6 percent) coded as 3, constructions (14.5 percent) coded as 4 and others (15.5 percent) mostly from trading activities. A study by Craig et al. (2007) used data set consisting about 2,200 local market observations per year for over eleven years from 1991 to 2001. On the other hand, Freel et al. (2012) used data from 10,942 firms categorized into three broad sectors that are production, knowledge-intensive services (generally categorized under service in this study), and wholesale and retail. Therefore, the difference in the data set probably the main reason for the contradict result from this study.

#### **4.5.5 Hypothesis 5: The Ethnicity of the Owner/manager**

The ethnicity of the owner/manager of the firm, found to be statistically significant, with negative relationship with the decision by owner/manager of Malaysian SMEs on bank loan application. The item for Malay ethnicity that referred as bumiputra is coded as 1, where other races like Chinese (coded as 2), Indian (coded as 3) and others (coded as 4) are categorized under non-bumiputra. Therefore, H5 on the relationship between ethnicity of the owner/manager of the firm and the decision to apply for bank loan is supported.

The findings of this study is consistent with researchers in Western countries that conclude that ethnic background is subject to discrimination, as studies found that access to finance is more difficult for blacks (Bates, 1991; Bates & Robb, 2013, 2015; Blanchard et al., 2008; Blanchflower et al., 1998; Cavalluzzo et al., 2002; Han et al., 2009a; Raturi & Swami, 1999; and Storey, 2004). The results of this study also agrees with Carter et al. (2015) that ethnicity plays as a significant factor in borrowers' decision not apply for bank loan due to fear of rejection and that the ethnicity affects the feeling of being discouraged in applying for bank loan (Fraser, 2009).

As this study is conducted in Malaysia, the ethnicity which normally classified into Indigenous or bumiputra and non-Indigenous or non-bumiputra, where the bumiputras have been given more attention by the government through the New Economic Policy. The findings by Han et al. (2009a) who found that discouraged borrowers are more likely to belong to an ethnic-minority group is highly agreed.



This study provides evidence that ethnic background of the SMEs owner/manager has an effect on the discouragement in applying for bank loan. The priority given to bumiputra especially in financial assistants has more or less affects the perceptions on the loan processing procedures among non-bumiputra. For example, the attention given more to bumiputra as reported in the The Edge (2014) that certain percentage was allocated for bumiputra applicants, probably boost the applicants among them. Simultaneously increase the discouragement among non-bumiputra.

#### **4.5.6 Hypothesis 6: The educational Background of the Owner/manager**

The educational background of Malaysian SMEs owner/manager has no significant difference with the decision whether to apply for bank loan or not. This result disagrees with Storey (2004) that higher education increase the bank loan application the result also contradict to a findings by Blumberg and Letterie (2007); and Vos et al. (2007) that less educated SME owners are more likely to apply for bank loan.

The results of this study indicate that the educational background of the owner/manager of Malaysian SMEs is not related to the discouragement. This is probably due to the emphasis given more on the experience in handling business rather than the educational in Malaysia set. Another possible reason for the difference may due to the percentage of respondents among graduates in total is

81.8 percent as compared to only 18.2 percent respondents with tertiary education as shown in Table 4.1 in page 159. Therefore, generalization may not be appropriate.

#### **4.5.7 Hypothesis 7: The Experience of the Owner/manager**

In this study, the experience among the owner/manager of the firm is expected to have a positive relationship with the decision by the owner/manager of Malaysian SMEs on bank loan application. However, the results of this study on the experience measured by number of year owner or manager of the business involved in the business activity, found to be negatively significant with the decision to apply for bank loan (coded as 1). This result indicates that the incidence of discouraged borrowers is higher among owners or managers of Malaysian SMEs with more working experience. Therefore, H7 on the positive relationship between the experience of the owner/manager and their decision to apply for bank loan is not supported.

This result does not agree with findings by previous studies (eg. Fatoki & Asah, 2011; Freel et al., 2012; Han et al., 2009a; Westhead et al., 2005; Wu et al., 2008) with findings that owner-managers with more diverse experience and resources are positively related to loan application, as compared to serial or novice entrepreneurs.

This study however, support the findings by Astebro and Bernhardt (2003) that probability of having a bank loan decreases with working experience of the SME

owners. Further, managerial experience including managerial network (i.e., networks with suppliers and customers) is not significantly related to the probability of SMEs having a bank loan (Le & Nguyen, 2009). Findings by Chakravarty and Xiang (2013) somehow found that the length of owners experience in operating the business is weakly negatively correlated with the borrower discouragement.

This study does not deny that experience in managing current or other business is important in boosting the confidence in the owner-manager of SMEs in applying for bank loan, where SME owner or manager with more experience probably is more established in the networking with the bank and able to provide both hard and soft information that reduce the discouragement.

However, the result of this study suggests that the incidence discouragement in applying bank loan exist among SMEs owners or managers with more experience, probably due to the bank practices in making commercial loan decisions that only consider on financial evidence of creditability (Astebro & Bernhardt, 2003). In addition, this study somehow agrees with that owner characteristics including experience are among factors that are unrelated to the decision to extend credit to small businesses (Cavalluzzo & Wolken, 2005). Finally, this study also suggests that the SMEs with more experienced owner or manager did not apply for bank loan as they already formed a good relationship with other lenders like suppliers, family and friends, therefore, will not apply for bank loan though they are capital seeker.

#### **4.5.8 Hypothesis 8: The Gender Difference**

The gender of the owner/manager of the firm, found to be statistically significant with the decision by owner/manager of Malaysian SMEs on bank loan application. Therefore, H8 on the relationship between gender of the owner/manager of the firm and the decision to apply for bank loan is supported.

Males (coded as 0) are more likely to apply for bank loans due to the need of outside financing and perception of easy to obtain loan and being a risk taker as compared to females (coded as 1). This study supports the findings by Freel et al. (2012) who revealed that almost 24 percent of majority female led businesses were discouraged to apply for loans compared to 14 percent of businesses led by men. This study also agrees with Storey (2004); and Cavalluzzo et al. (2002) that females are less likely to apply for loans than males because of the fear that their loan application will be rejected.

The result of this study also consistent with findings by Garwe and Fatoki (2012) that the demand for bank loan differs among genders of the SMEs owners. Probably due to the reason that they may have experienced being rejected by the bank (Kon & Storey, 2003) and therefore perceive that they have greater barriers in accessing for finance (Carter & Rosa, 1998; and Roper & Scott, 2009) and the view that bankers regard them as less credible (Hill et al., 2006). Further, the advancement in information technology with witness the online and home based businesses among female owners also contribute to the less financial need (Arenius & Autio, 2006).

This study further suggests that gender is the factor that affects the decision among owner/manager in applying for bank loan. This is probably due to the limited networking in female owner/manager and inferior among typical females that perceived difficulty in applying for loan and being rejected.

#### **4.5.9 Hypothesis 9: Accounting Information**

Though the financial statement is a key factor in bank lending decisions (Edmond & Collins, 1976) and good information concerning the firms finance and governance is crucial for a bankable business plan (Wattanaputtipaisan, 2003), this study reveals that the SMEs with financial statement prepared by professional accountants and being audited is not statistically significant to the bank loan application decision. This result differs from findings by Brown et al. (2011) that audited firms are more likely to apply for a bank loan. This study also fails to agree with Chakravarty and Xiang (2013) that SMEs operating in countries where financial statements audited by external auditors are less likely to be discouraged from applying for bank loan.

This study is unable to demonstrate that SMEs with financial information prepared by professional accountants or not are not related to the discouragement. Descriptive analysis shown in Table 4.3 in page 160 revealed that most of the respondents did not involve the professionals either internal or external in the preparation of their financial information. Further, Table 4.12 below shows that

the number of SMEs that are owned by single owner and discouraged from applying for bank loan outnumbered the SMEs in the same category that applied for.

On the other hand, the number of SMEs with limited liability (Sendirian Berhad) that applied for bank loan are much higher than those who did not (discouraged). In addition, firms registered as Sendirian Berhad are required to have their financial statement being audited under Companies Act 1975 whereas SMEs with single ownership are not required to do so. Therefore, it is hard to find the significant different between those who applied with those discouraged and the generalization is not appropriate for this study.

Table 4.12  
*Profiles of SME – Legal Status*

Item	Total N= 110	Applied N=72	Discouraged N=38
Legal Status: Sole Proprietor	20	9	11
Partnership	13	6	7
Private Limited	77	57	20

#### 4.5.10 Hypothesis 10: Innovativeness of the SMEs

Lack of innovativeness in Malaysian SMEs does not statistically significant to the bank loan application. This results disagrees with findings by Angilella and Mazzu (2015); Brown et al. (2011); and Freel (2007) that innovative firms are less

successful in the credit market. However, this study conform with findings by Freel et al. (2012) that there is no correlation between strong strategic focus on innovation with discouragement. This finding from this study also provides support to Mina et al. (2013) that the R&D-intensive and less R&D-intensive firms are equally have limited credit availability or supply of credit due to the uncertain innovation activities.

Therefore, this study suggests that the innovativeness of the SMEs is not the factor for SMEs owner/manager being discouraged from applying for bank loan. This may due to the low in activities and expenses spent on innovation among Malaysia SMEs though the awareness in importance of being innovative is increasing. A survey by Malaysian Productivity Corporation (MPC) titled ‘Technological Innovation Capabilities of Malaysian-owned Companies’ in year 2012 reported that 77 percent of SMEs spent less than RM100,000 per year on innovation activities (Economic Planning Unit, 2010). This study adapts measurement used in Brown et al. (2011); Cosh et al. (2009); Erdil et al. (2003); and Mina et al. (2013) that measure the innovativeness using whether the firms developed new commercializable technology and the frequency of business producing new products. Therefore, it is not appropriate to generalize the relationship between innovation and discouragement in current Malaysian setting.

#### **4.5.11 Hypothesis 11: The Availability of Collateral**

Though bank lending decisions are based on the availability of collateral (Menkhoff et al., 2006; Niinimäki, 2009; Ono & Uesugi, 2009; and

Wattanapruttipaisan, 2003), the result of this study finds no significant relationship between availability of collateral and the decision in bank loan application. This is against the findings by Kon and Storey (2003) that good borrowers who know that they do not have the level of collateral required, are discouraged from applying for bank loan and so with non-applicants that discouraged by the tough collateral requirements (Brown et al., 2011).

The majority of the respondents in this study have been in operation for more than ten years (47.3 percent between ten to twenty years and 19.1 percent with more than twenty years) as shown in Table 4.1. This possibly indicates that they are more established and have no difficulties in providing collateral. The helps from the government through its CGC that provides the financial guarantee and credit information among Malaysian SMEs may also reduce the importance of collateral in Malaysian setting.

#### **4.5.12 Hypothesis 12: Relationship Banking**

The result of the study reveals that among Malaysian SMEs, good relationship with the bank has no statistically significant with the decision in bank loan application. This study fails to agree with the findings by Han et al. (2009a); and Kon and Storey (2003) that longer relationship with the bank reduces the probability of being discouraged from applying for bank loan. This results is also against the findings by Chakravarty and Xiang (2013) that the relationship with multiple



banking reduces the probability of small firms being discouraged in bank loan application.

However, the result of this study is in line with findings that lending relationships failed to play a significant role on credit availability (Cole et al., 2004; Jiangli et al., 2008; and Petersen & Rajan, 1994) and does not reduce the collateral requirement (Menkhoff et al., 2006). Therefore, the findings of this study suggest that the relationship between SMEs and banks, in way of the length or concentration has no significant relationship to the decisions by SMEs in bank loan application.



#### **4.5.13 Hypothesis 13: The Application Cost**

The application cost expected to be positively associated with the decision to apply for bank loan among Malaysian SMEs. The results of this study reveal that the increase in in-kind and psychic costs leads to the loan application among owners/managers of Malaysian SMEs. Therefore, H13 on the relationship between application cost and the decision to apply for bank loan is supported.

This study proves that the application cost has a statistically significant impact on the discouragement among SMEs owner/manager in Malaysia. Application costs include financial, in-kind and psychic costs (Kon & Storey, 2003). This include the financial costs i.e. payments to other parties involved in the preparation of information required (Blumberg & Letterie, 2007). The in-kind cost, that includes

the time spent in completing the bank loan application form, and travelling and meeting with the bank officers, and also the psychic cost is the worry or anxiety experienced by the owner in sharing private information relating to their business plan and strategy to a third party like outside professionals (Kon & Storey, 2003). If the firm is able to provide useful and quality information, as required by the bank on their own, this cost could be eliminated.

This study also confirms the findings by Han et al. (2009b) where the application costs that proxy to the physical distance of the firm with the primary lender, and whether the application was made online and that none of the variables are related to the discouragement. This study measures the willingness of owners/managers of the Malaysian SMEs in sharing financial and no-financial information with external parties like bank officers, accountants and consultants that constitute the psychic cost and the use of online application rather than conventional method of application as in-kind costs. Therefore this study concludes that the higher the willingness will reduce the incidence of borrower discouragement among Malaysian SMEs.

The following Table 4.13 presents the summary research questions, objectives and the overall results of the hypotheses in this study. A total of six hypotheses are supported while seven are not supported.

Table 4.13

*Research Question, Research Objectives, Hypotheses and Summary of the Results*

<b>Research Questions</b>	<b>Research Objectives</b>	<b>Research Hypotheses</b>	<b>Findings</b>
What are the characteristics of SMEs and their owners that discourage them from applying for bank loan facilities	To identify the characteristics of firms and their owners that refrain themselves from applying for bank loan facilities	H1: The size of the firm is positively (negatively) related to the bank loan application (discouragement) among SMEs.	Supported
		H2: The age of the firm is positively (negatively) related to the bank loan application (discouragement) among SMEs.	Supported
		H3: Sendirian Berhad firm is positively (negatively) related to the bank loan application (discouragement) among SMEs.	Not Supported
		H4: Type of industry is negatively (positively) related to the bank loan application (discouragement) among SMEs.	Not Supported
		H5: The ethnicity of the owner-manager of the firm is negatively (positively) related to the bank loan application (discouragement) among SMEs.	Supported
		H6: The educational background of the owner-manager of the firm is positively (negatively) related to the bank loan application (discouragement) among SMEs.	Not Supported
		H7: The experience of the owner/manager of the firm is positively (negatively) related to the bank loan application (discouragement) among SMEs.	Not Supported

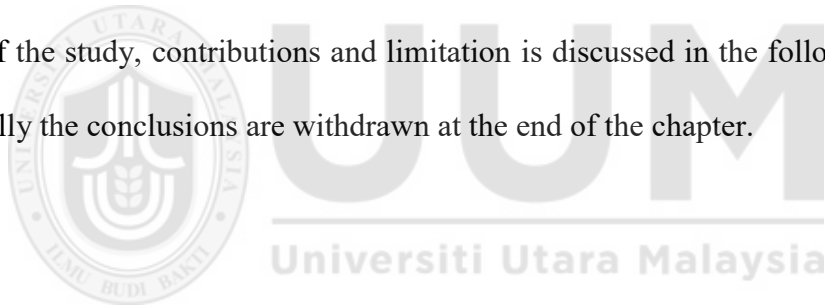
Table 4.13 (Continued)

Research Questions	Research Objectives	Research Hypotheses	Findings
		H8: The female SME owner or managers is negatively (positively) related to the application (discouragement) for bank loan among SMEs.	Supported
What are the external factors that help to explain why SMEs do not apply for bank loan facilities	To examine the relationship of the following factors concerning the discouragement to SMEs in applying for bank loan: - Quality of business	H9: SMEs with accounting information being compiled, reviewed and/or audited by a professional accountant are positively (negatively) related to the bank loan application (discouragement) among SMEs.	Not Supported
		H10: Innovativeness of the SMEs is positively (negatively) related to the bank loan application (discouragement) among SMEs.	Not Supported
		H11: The availability of collateral is positively (negatively) related to the bank loan application (discouragement) among SMEs.	Not Supported
	- Relationship banking	H12: SMEs with a good relationship with a bank are positively (negatively) related to the bank loan application (discouragement) among SMEs.	Not Supported
	- Application cost	H13: The application cost is positively (negatively) related to the bank loan application (discouragement) among SMEs.	Supported

#### **4.6 Summary of the Chapter**

This chapter presents the results of all analyses carried out in this research. The first section displays the profile of respondents categorized as SMEs (business) and their owner/manager. The following section discloses the results of descriptive analysis carried out on respondents, followed by section that reveals the result of regression analysis applied in this study. The final section discusses the results of all hypotheses in this research.

The overview of the study, contributions and limitation is discussed in the following chapter and finally the conclusions are withdrawn at the end of the chapter.



## **CHAPTER FIVE**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter is the final part of this report. It summarizes the general overview of the study; discusses the methodological, theoretical and practical contributions; limitations and suggestions for future study; and followed by the conclusions for the whole study.

#### **5.2 Overview of the study**

This study carried out in the midst of the importance of SMEs in the Malaysian economy, their financing needs and the great numbers of financing facilities offered by bank and other financial institutions plus with a position where Malaysia has been ranked as the first in the world to provide easy credit facilities for six consecutive years. Despite all above, there are good borrowers who need for capital but discouraged from applying for bank loan due to the fear of rejection.

The objective of this study is to identify the characteristics of Malaysian SMEs and other factors that discouraged them from applying for bank loans. The characteristics in this study categorized as business attributes, SME owner/manager profile, quality of the SME business and the extrinsic values of the

SMEs that includes the relationship between the firm and banks, application cost, alternative source of finance and political connections. This study considers the borrowers (SMEs) perspective instead of the loan provider as cited by most literatures.

This study uses primary data by sending away a total of 1,425 self-administered questionnaires to Malaysian SMEs registered with SME Corp with the exclusion of SMEs from Sabah and Sarawak. With the number of 110 usable questionnaires, this study examines the discouraged borrower model using logistic regression analysis.

A total of thirteen hypotheses were developed in this study, however only six hypotheses are supported leaving seven not supported. The findings of this study indicate that size and age of the SMEs are significant predictors of SMEs being discouraged from applying for bank loan. Further, the gender, experience and ethnicity of the SME owner/manager are also significantly related to their discouragement. Finally, the financial, in-kind and psychic costs that categorized under application costs are also found statistically significant as determinants of SMEs discouraged from applying for bank loan. These later findings support the Theory of Discouraged Borrowers.

### **5.3 Contributions**

This study extends the contributions to knowledge contributed by previous studies in several ways. The presentation of contributions in this section is divided into methodological contributions, theoretical contributions and practical and policy implications.

#### **5.3.1 Methodological Contributions**

This study focuses on profiling the SMEs in Malaysia that discouraged from applying for bank loan and also the internal and external factors that discourage Malaysian SMEs from applying for loan from the bank and other financial institutions. Previous studies that look at the non-applicants referred as discouraged borrowers, measure the accounting information (Blumberg & Letterie, 2007; Brown et al., 2011; Han et al., 2009a; and Hyytinen & Pajarinen, 2008); innovativeness (Cosh et al., 2009; Erdil et al., 2003; and Mina et al., 2013); collateral (Blumberg & Letterie, 2007; Brown et al., 2011; and Fatoki & Asah, 2011); relationship (Berger et al., 2001; Berger & Udell, 1995; Cole et al., 2004; Han et al., 2009a) using binary data, which is limited in terms of statistical analysis. This study adopts a different way to obtain richer information by applying categorical scales for its independent variables that consists of four options from respondents. The use of different data, enable researcher of this study to apply an additional way of testing the model.



Further, the questionnaire used in this study is developed basically to answer the research questions. The items in the constructs like application cost are extended to six items as compared to study by Han et al. (2009a) that only measure in-kind cost by the distance (in miles) and whether the application of loan made online or vice versa (1,0). This serves as major contribution from this study to the methodology related to this study.

### **5.3.2 Theoretical Contribution**

This subsection discusses the theoretical contribution established from the review of literature and the results drawn from this study. Previous studies relating to the financing of SMEs to date has been likely to focus on the supply side rather than the demand as intended in this study. Most of previous researchers characterized firms or SMEs that made loan application but being rejected by the bank.

Most of the studies that were carried out relating to discouraged borrowers only characterize the business and owner/manager attributes (e.g. Arenius & Autio, 2006; Blumberg & Letterie, 2007; Brown et al., 2011; Cavalluzzo et al., 2002; Fraser, 2009; Garwe & Fatoki, 2012; Hill et al., 2006; Hulten, 2012; Hulten & Ahmed, 2013; Roper & Scott, 2009; Vos et al., 2007; and Xiang et al., 2014). Only a few studies that view other factors like quality of business (Fatoki & Asah, 2011; Grilli, 2005; and Mina et al., 2013); relationship with the banks (Chakravarty & Xiang, 2013; Cole & Sokolyk, 2016; Freel et al., 2012; Han et al., 2009b; and Mac an Bhaird et al., 2016); and finally on the application cost (Bates & Robb, 2013; Frangos et al., 2012; and Han et al., 2009a).

No studies known to the researcher that associate the alternative financing and political connections with discouraged borrowers. A few studies carried out by Claessens et al. (2008); Faccio et al. (2006); Firth et al. (2009); and Khwaja and Mian (2005) that are related to political connections but viewed on other area of studies. Therefore this study attempts to fill the theoretical gap by applying the same method and variable but with a different outcome of the study, that is, the factors that are associated to the non-application for bank loan among Malaysian SMEs. However, due to results from reliability test, where both constructs counted a reliability of less than .60, and understanding that reliability is an assessment of the degree of consistency between multiple measurements of a variable and validity is the extent to which a measure or set measures correctly represent the concept of study, both alternative financing and political connection then excluded in this study. These two variables may be reviewed for future studies with different set of measurement.

This study also evaluates whether the Theory of Discouraged Borrowers can be tested in the Malaysian context where anecdotal and empirical evidence shows that there are obstacles in accessing bank loans among Malaysian SMEs, whereas the report by the World Bank ranks Malaysia as the first country in the list to offer ease in accessing bank loans. The findings of this study confirm that application costs are statistically significant to the decision not to apply for bank loan by Malaysian SMEs. This gives a support to the Theory of Discouraged Borrowers that good borrowers satisfy the condition in which their expected return is higher than application cost (Kon & Storey, 2003).

Thus, this study is believed to enhance the body of knowledge pertaining to the theory as an addition to the findings by previous studies that have already tested the theory in the United Kingdom, the United States, China and various European Countries.

### **5.3.3 Practical and Policy Implications**

This research lends support to the view that Malaysian SMEs who did not apply for bank loan are discouraged from applying due to the age and size of the business and also the application costs involved in the process of loan application. The findings could possibly imply that the loan providers, in this study are bankers should be more flexible or less rigid to the young and small businesses in marketing their products (bank loan). Interviews and site visits could be alternative to the information obtained through forms and statements. Soft information gathered through interviews and site visits possibly be more meaningful and reliable as compared to the normal statements.

This study may also reflect to the regulators and policy makers such as BNM and other regulating bodies, in deliberating policies that suit the needs of the Malaysian SMEs. Exposure to more educational programs and financial presentation guidelines might be considered necessary to SMEs to boost their confidence to take part actively in the credit market. In other words, proper trainings and monitoring by respective organization are needed to increase the knowledge and concern on the need of proper financial reporting and other working papers such

as workable business plan. The increase in the number of loan applicants among good borrowers will lead to the merrier credit market, thus strengthen the economies of the enterprises, bankers and the country as a whole.

#### **5.4 Limitations and Suggestions for Future Study**

Like other studies in the past, this study is not without limitations. The generalizability of the findings from this study may be restricted by the limitations in the methodology. Firstly, the data gathered is only based on 110 responses, which may not be sufficiently large to represent all SMEs in Malaysia. However, the 110 responses represent the four regions in West Malaysia. The response rate of 12.67 percent is fairly normal in Malaysian environment as experienced in other studies involving SMEs. Future research related to this issue may be conducted in more effective way of obtaining responses and may also include SMEs from Sabah and Sarawak for a better generalization and picture of Malaysian SMEs.

Secondly, the dependent variable in this study applies a nominal scale, that is to answer either 'yes' or 'no' for the question on whether the business applied for bank loan or not. The use of dichotomous scale for dependent variable restricts the choice of analysis to the binomial logistic regression. Future study may consider using other type of scales to measure the extent of discouragement among owners of SMEs may have towards applying for bank loans to enrich the way of analyzing and model testing.

This study is intended to be different from previous studies in measuring variables by extending the binary choice to Likert scale, with the belief that category scales are a more sensitive measure than a scale with only two response categories (Zikmund, 2003). The choice of not all true, not very true, somewhat true and very true are the extension of the binary choice applied in previous studies. The questions and scaling should be revised in future in order to yield a good interpretation.

Thirdly, many of the constructs in this study have a very limited item, mostly contains only four items. This limits the support to a good construct as well as the validity and reliability. The questionnaire used in this study may need a few improvements on the number of items in each of the constructs. Fourth, the last two constructs in the initial model in this study, i.e. alternative financing and political connection may be reorganized with different items and to be included back in the model.

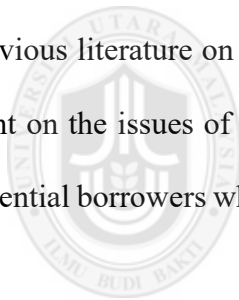
Finally, the application of qualitative method that involves personal interviews with the owner/managers is another possible method as an addition to this quantitative method used in this study. Survey and interview are valuable methods in obtaining information and getting a better picture on the issue.

## **5.5 Conclusions**

This study focuses on profiling the SMEs in Malaysia that discouraged from applying for bank loan. Further, it also reveals internal and external factors that

dishearten Malaysian SMEs from applying for loan from the bank and other financial institutions. This study also introduces the model of discourage borrowers that includes the attributes of SMEs, the profiles of owner/manager of SMEs, the quality of the business and the extrinsic value of the SMEs, inspired by the Theory of Discouraged Borrowers and previous literatures.

The findings from this study demonstrates that size and age of the SMEs, gender, experience and ethnicity of the owner/manager of the SMEs and financial, in-kind and psychic costs are significant predictors of SMEs being discouraged from applying for bank loan. The results of this study also provide support to the Theory of Discouraged Borrowers and therefore are anticipated to contribute to the previous literature on this issue. The findings of this study are believed to shed a light on the issues of SMEs financing and the availability of credit facilities and potential borrowers who did not apply for loan due to fear of rejection in Malaysia.



Universiti Utara Malaysia

## REFERENCES

- Abdullah, A. (2010). Measuring TQM implementation: A case study of Malaysian SMEs. *Business Excellence*, 14(3), 3–15.
- Ahsan, A. A. (2009, April 17). PKS: Lebih mudah dapat biaya. *Utusan Malaysia*. Kuala Lumpur.
- Ajagbe, M. A., Long, C. S., Aslan, S. A., & Ismail, K. (2012). Investment in Technology Based Small and Medium Sized Firms in Malaysia : Roles for Commercial Banks. *International Journal of Research in Management & Technology*, 2(2), 147–153.
- Alam, S. S. (2009). Adoption of internet in Malaysian SMEs. *Journal of Small Business and Enterprise Development*, 16(2), 240–255.
- Allee, K. D., & Yohn, T. L. (2009). The demand for financial statements in an unregulated environment: An examination of the production and use of financial statements by privately held small businesses. *The Accounting Review*, 84(1), 1–25. <http://doi.org/10.2308/aecr.2009.84.1.1>
- Angelini, P., Salvo, R. D., & Ferri, G. (1998). Availability and cost of credit for small businesses : Customer relationships and credit cooperatives. *Journal of Banking & Finance*, 22, 925–954.
- Angilella, S., & Mazzu, S. (2015). The financing of innovative SMEs: A multicriteria credit rating model. *European Journal of Operational Research*, 244, 540–554. <http://doi.org/10.1016/j.ejor.2015.01.033>
- Anuar, A., & Yusuff, R. M. (2011). Manufacturing best practices in Malaysian small and medium enterprises (SMEs). *Benchmarking: An International Journal*, 18(3), 324–341. <http://doi.org/10.1108/14635771111137750>
- Ardic, P. O., Mylenko, N., & Saltane, V. (2012). Access to finance by small and medium enterprises: A cross-country analysis with a new data set. *Pacific Economic Review*, 17(4), 491–513. <http://doi.org/10.1111/j.1468-0106.2012.00596.x>
- Arenius, P., & Autio, E. (2006). Financing of small businesses: Are Mars and Venus more alike than different? *Venture Capital*, 8(2), 93–107. <http://doi.org/10.1080/13691060500433793>
- Aris, N. M. (2006). SMEs : Building blocks for economic growth. In *National Statistics Conference Department of Statistics , Malaysia* (pp. 1–13).
- Astebro, T., & Bernhardt, I. (2003). Start-up financing, owner characteristics, and survival. *Journal of Economics and Business*, 55(4), 303–319. [http://doi.org/10.1016/S0148-6195\(03\)00029-8](http://doi.org/10.1016/S0148-6195(03)00029-8)
- Aziz, Y. A., Awang, K. W., & Zaiton, S. (2012). Challenges faced by micro, small, and medium lodgings in Kelantan, Malaysia. *International Journal of Economics and Management*, 6(1), 167–190.

- Baas, T., & Schrooten, M. (2006). Relationship Banking and SMEs: A Theoretical Analysis. *Small Business Economics*, 27, 127–137.
- Baker, S. (2002). *The complete idiot's guide to business statistics*. New York: Penguin Group.
- Bandura, A. (1989). Human agency in social cognitive theory. *The American Psychologist*, 44(9), 1175–1184. <http://doi.org/10.1037/0003-066x.44.9.1175>
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50, 248–287.
- Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117–148.
- Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*, 52, 1–26. <http://doi.org/10.1146/annurev.psych.52.1.1>
- Bank Negara Malaysia. (2017). *Financial Inclusion Data for Malaysia*. Kuala Lumpur. Retrieved from [http://www.bnm.gov.my/index.php?ch=fi&pg=fi\\_download&ac=445&lang=en](http://www.bnm.gov.my/index.php?ch=fi&pg=fi_download&ac=445&lang=en)
- Bates, T. (1991). Commercial bank financing of white and black-owned small business start-ups. *Quarterly Review of Economic and Business*, 31(1), 64–80.
- Bates, T., & Robb, A. (2013). Greater access to capital is needed to unleash the local economic development potential of minority-owned businesses. *Economic Development Quarterly*, 27(3), 250–259. <http://doi.org/10.1177/0891242413477188>
- Bates, T., & Robb, A. (2015). Has the Community Reinvestment Act increased loan availability among small businesses operating in minority neighbourhoods? *Urban Studies*, 52(9), 1702–1721. <http://doi.org/10.1177/0042098014534903>
- Bates, T., & Robb, A. (2016). Impacts of owner race and geographic context on access to small-business financing. *Economic Development Quarterly*, 30(2), 159–170. <http://doi.org/10.1177/0891242415620484>
- Bauwhede, H. V., De Meyere, M., & Cauwenberge, P. V. (2015). Financial reporting quality and the cost of debt of SMEs. *Small Business Economics*, 45(1), 149–164. <http://doi.org/10.1007/s11187-015-9645-1>
- Beaten, D. E., Bombardier, C., Guillemin, F., & Ferraz, M. B. (2000). Guidelines for the process of Cross Cultural adaptation of Self Report measures. *Spine*, 25(24), 3186–3191. <http://doi.org/10.1097/00007632-200012150-00014>
- Beattie, V., McInnes, B., & Fearnley, S. (2004). A methodology for analysing and evaluating narratives in annual reports: A comprehensive descriptive profile and metrics for disclosure quality attributes. *Accounting Forum*, 28(3), 205–236. <http://doi.org/10.1016/j.accfor.2004.07.001>



- Beck, T., & Demirguc-Kunt, A. (2006). Small and medium-size enterprises: Access to finance as a growth constraint. *Journal of Banking & Finance*, 30(11), 2931–2943. <http://doi.org/10.1016/j.jbankfin.2006.05.009>
- Beck, T., Lu, L., & Yang, R. (2015). Finance and growth for microenterprises: Evidence from rural China. *World Development*, 67(71103038), 38–56. <http://doi.org/10.1016/j.worlddev.2014.10.008>
- Berger, A. N., & Udell, G. F. (2007). Small business credit scoring and credit availability. *Journal of Small Business Management*, 45(1), 5–22. <http://doi.org/10.1111/j.1540-627X.2007.00195.x>
- Berger, A. N., Klapper, L. F., & Udell, G. F. (2001). The ability of banks to lend to informationally opaque small businesses. *Journal of Banking & Finance*, 25(12), 2127–2167. [http://doi.org/10.1016/S0378-4266\(01\)00189-3](http://doi.org/10.1016/S0378-4266(01)00189-3)
- Berger, A. N., & Udell, G. F. (1990). Collateral, loan quality and bank risk. *Journal of Monetary Economics*, 25, 21–42.
- Berger, A. N., & Udell, G. F. (1995). Relationship lending and lines of credit in small firm finance. *Journal of Business*, 68(3), 351–381.
- Berger, A. N., & Udell, G. F. (1998). The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. *Journal of Banking and Finance*, 22, 873–897.
- BERNAMA. (2008, July 9). Bank Negara urges banks to seek out SME customers in difficulties.
- Bharath, S., Dahiya, S., Saunders, A., & Srinivasan, A. (2007). So what do I get? The bank's view of lending relationships. *Journal of Financial Economics*, 85(2), 368–419. <http://doi.org/10.1016/j.jfineco.2005.08.003>
- Blanchard, L., Zhao, B., & Yinger, J. (2008). Do lenders discriminate against minority and woman entrepreneurs? *Journal of Urban Economics*, 63(2), 467–497. <http://doi.org/10.1016/j.jue.2007.03.001>
- Blanchflower, D. G., Levine, P. B., & Zimmerman, D. J. (1998). *Discrimination in the small business credit market* (6840).
- Bliss, M. A., & Gul, F. A. (2012). Political connection and cost of debt: Some Malaysian evidence. *Journal of Banking and Finance*, 36(5), 1520–1527. <http://doi.org/10.1016/j.jbankfin.2011.12.011>
- Blumberg, B. F., & Letterie, W. A. (2007). Business starters and credit rationing. *Small Business Economics*, 30(2), 187–200. <http://doi.org/10.1007/s11187-006-9030-1>
- Boocock, J. G., & Mohd Sharif, M. N. (2005). Measuring the effectiveness of credit guarantee schemes. *International Small Business Journal*, 23(4), 427–454.
- Boocock, J. G., & Wahab, I. A. (2001). The financing of small firms : Different continents , the same problems ? *New England Journal of Entrepreneurship*,

4(2), 13–31.

- Brennan, M. (1992). Techniques for Improving Mail Survey Response Rate. *Marketing Bulletin*, 24–27.
- Brewer, E. (2007). On lending to small firms. *Journal of Small Business Management*, 45(1), 42–46.
- Brown, M., Ongena, S., Popov, A., & Yesin, P. (2011). Who needs credit and who gets credit in Eastern Europe? *Economic Policy*, 26(65), 93–130.
- Bruns, V., & Fletcher, M. (2008). Banks' risk assessment of Swedish SMEs. *Venture Capital*, 10(January), 171–194.
- Calder, B. J., Phillips, L. W., & Tybout, A. M. (1982). The Concept of External Validity. *Journal of Consumer Research*, 9(3), 240–244.
- Calder, B. J., Phillips, L. W., & Tybout, A. M. (1983). Beyond External Validity. *Journal of Consumer Research*, 10(1), 112–114.
- Canton, E., Grilo, I., Monteagudo, J., & Zwan, P. (2013). Perceived credit constraints in the European Union. *Small Business Economics*, 41(3), 701–715. <http://doi.org/10.1007/s11187-012-9451-y>
- Carter, S., Mwaura, S., Ram, M., Trehan, K., & Jones, T. (2015). Barriers to ethnic minority and women's enterprise: Existing evidence, policy tensions and unsettled questions. *International Small Business Journal*, 33(1), 49–69. <http://doi.org/10.1177/0266242614556823>
- Carter, S., & Rosa, P. (1998). The financing of male and female-owned business. *Entrepreneurship & Regional Development*, 10(3), 225–241.
- Cavalluzzo, K. S., & Cavalluzzo, L. C. (2002). Competetion, Small Business Financing and Discriminations. *Journal of Business*, 75(4), 641–679.
- Cavalluzzo, K. S., Cavalluzzo, L. C., & Wolken, J. D. (2002). Competition, small business financing, and discrimination: evidence from a new survey. *The Journal of Business*, 75(4), 641–679. <http://doi.org/10.1086/341638>
- Cavalluzzo, K. S., & Wolken, J. (2005). Small business loan turndowns, personal wealth and discrimination. *The Journal of Business*, 78(6), 2153–2178. <http://doi.org/10.1086/497045>
- Chakravarty, S., & Xiang, M. (2013). The international evidence on discouraged small businesses. *Journal of Empirical Finance*, 20(1), 63–82. <http://doi.org/10.1016/j.jempfin.2012.09.001>
- Chan, S. H., & Lin, J. J. (2013). Financing of micro and small enterprises in China: An exploratory study. *Strategic Change*, 22, 431–446.
- Chapman, D. W., & Carter, J. F. (1979). Translation Procedures for the Cross Cultural Use of Measurement Instruments. *Educational Evaluation and Policy Analysis*, 1(3), 71–76.

- Chong, C. W., Chong, S. C., & Gan, G. C. (2011). Inter-organizational knowledge transfer needs among small and medium enterprises. *Library Review*, 60(1), 37–52. <http://doi.org/10.1108/00242531111100568>
- Chua, W. F. (1986). Radical Development in accounting Thought. *The Accounting Review*, 61(4), 601–632.
- Claessens, S., Feijen, E., & Laeven, L. (2008). Political connections and preferential access to finance : the role of campaign contributions. *Journal of Financial Economics*, 88(3), 554–580.
- Cole, R. A. (1998). The importance of relationships to the availability of credit. *Journal of Banking & Finance*, 22, 959–977.
- Cole, R. A., Goldberg, L. G., & White, L. J. (2004). Cookie cutter vs . character : The micro structure of small business lending by large and small banks. *Journal of Financial and Quantitative Analysis*, 39(2), 227–252.
- Cole, R. A., & Sokolyk, T. (2016). Who needs credit and who gets credit? Evidence from the Surveys of small business finances. *Journal of Financial Stability*, 24, 40–60.
- Coleman, S. (2000). Access to Capital and Terms of Credit: A Comparison of Men- and Women-Owned Small Businesses. *Journal of Small Business Management*, 38(3), 37–52. Retrieved from <http://ezp.waldenulibrary.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=3308607&scope=site>
- Cooper, D. R., & Schindler, P. S. (2003). *Business Research Methods* (8th ed.). Boston, USA: McGraw-Hill Irwin.
- Cosh, A., Cumming, D., & Hughes, A. (2009). Outside entrepreneurial capital. *The Economic Journal*, 119, 1494–1533. <http://doi.org/10.1111/j.1468-0297.2009.02270.x>.
- Cowling, M., & Mitchell, P. (2003). Is the small firms loan guarantee scheme hazardous for banks or helpful to small business. *Small Business Economics*, 21, 63–71.
- Craig, B. R., Jackson, W. E., & Thomson, J. B. (2007). Small firm finance , credit rationing , and the impact of SBA-guaranteed lending on local economic growth. *Journal of Small Business Management*, 45(1), 116–132.
- Cronin, J. J., & Taylor, S. A. (1992). Measuring service quality: A reexamination and extension. *Journal of Marketing*, 58, 55–68.
- Cziraky, D., Tisma, S., & Pisarovic, A. (2005). Determinants of the low SME loan approval rate in Croatia. *Small Business Economics*, 25, 347–372.
- Department of Statistic Malaysia. (2012). *Economic census 2011: profile of small medium enterprise*. <http://doi.org/ISBN 978-983-9044-67-6>
- Department of Statistic Malaysia. (2017). *The Malaysian Economy: special highlights Economic Census 2016: Profile of SMEs*.

- Dillman, D. A. (2000). *Mail and internet surveys: the tailored design methods* (2nd ed.). New York: John Wiley & Son.
- Economic Planning Unit. (2010). *Tenth Malaysia Plan 2011-2015. Rancangan Malaysia Kesepuluh (Tenth Malaysia Plan) : 2011-2015*.
- Economic Planning Unit. (2015). *Eleventh Malaysia Plan 2016-2020*. (Economic Planning Unit, Ed.) *Rancangan Malaysia Kesebelas (Eleventh Malaysia Plan) : 2016-2020*. Kuala Lumpur: Percetakan Nasional. Retrieved from <http://rmk11.epu.gov.my/book/eng/Elevent-Malaysia-Plan/RMKe-11Book.pdf>
- Eddleston, K. A., Ladge, J. J., Mitteness, C., & Balachandra, L. (2014). Do you see what I see? Signaling effects of gender and firm characteristics on financing entrepreneurial ventures. *Entrepreneurship: Theory and Practice*, 40(3), 489–514. <http://doi.org/10.1111/etap.12117>
- Edmond, A. P., & Collins, F. (1976). Bankers -accountants -financial statements : Their relationship to small-business loan decision. *Journal of Small Business and Enterprise Development*, 14, 16–22.
- Elsas, R., & Krahnen, J. P. (1998). Is relationship lending special ? Evidence from credit- file data in Germany. *Journal of Banking & Finance*, 22, 1283–1316.
- Erdil, D., Keskin, H., & Erdil, O. (2003). The Relationship Between Market Orientation, Firm Innovativeness and Innovation Performance. *The Journal of Global Business Technology*, 1, 3–13.
- Faccio, M., Masulis, R. W., & Connell, J. M. (2006). Political connections and corporate bailouts. *The Journal of Finance*, LXI(6), 2597–2635.
- Fatoki, O., & Asah, F. (2011). The impact of firm and entrepreneurial characteristics on access to debt finance by SMEs in King Williams' Town, South Africa. *International Journal of Business and Management*, 6(8), 170–179. <http://doi.org/10.5539/ijbm.v6n8p170>
- Fatt, C. K., Khin, E. W., & Yap, P. (2010). Doctrine of corporate governance and competition laws: The Malaysian perspectives. *African Journal of Business Management*, 4(6), 1175–1184.
- Ferguson, L. (2004). External validity, generalizability, and knowledge utilization. *Journal of Nursing Scholarship*, 36(1), 16–22.
- Firth, M., Lin, C., Liu, P., & Wong, S. M. L. (2009). Inside the black box : Bank credit allocation in China ' s private sector. *Journal of Banking and Finance*, 33(6), 1144–1155. <http://doi.org/10.1016/j.jbankfin.2008.12.008>
- Frangos, C., Fragkos, K., Sotiropoulos, I., Manolopoulos, G., & Valvi, A. (2012). Factors affecting customers' decision for taking out bank loans: A case of Greek customers. *Journal of Marketing Research and Case Studies*, 2012, 1–16. <http://doi.org/10.5171/2012.927167>
- Frank, M. Z., & Goyal, V. K. (2003). Testing the pecking order theory of capital structure. *Journal of Financial Economics*, 67(2), 217–248.

[http://doi.org/10.1016/S0304-405X\(02\)00252-0](http://doi.org/10.1016/S0304-405X(02)00252-0)

- Fraser, S. (2009). Is there ethnic discrimination in the UK market for small business credit? *International Small Business Journal*, 27(5), 583–607. <http://doi.org/10.1177/0266242609338756>
- Freel, M. (2007). Are small innovators' credit rationed? *Small Business Economics*, 28, 23–35.
- Freel, M., Carter, S., Tagg, S., & Mason, C. (2012). The latent demand for bank debt: Characterizing “discouraged borrowers.” *Small Business Economics*, 38(4), 399–418. <http://doi.org/10.1007/s11187-010-9283-6>
- Frid, C. J. (2009). Acquiring financial resources to form new ventures: pecking order theory and the emerging firm. *Frontiers of Entrepreneurship Research*, 29(1), 1–15. <http://doi.org/10.1080/08276331.2015.1082895>
- Gama, A. P. M., Duarte, F. D., & Esperança, J. P. (2017). Why discouraged borrowers exist? An empirical (re)examination from less developed countries. *Emerging Markets Review*, 33(September), 19–41. <http://doi.org/10.1016/j.ememar.2017.08.003>
- Garwe, D. K., & Fatoki, O. (2012). The impact of gender on SME characteristics and access to debt finance in South Africa. *Development Southern Africa*, 29(3), 448–461. <http://doi.org/10.1080/0376835X.2012.706040>
- Gerlach-Kristen, P., O'Connell, B., & O'Toole, C. (2015). Do credit constraints affect SME investment and employment? *Economic and Social Review*, 46(1), 51–86.
- Ghobadian, A., Speller, S., & Jones, M. (1994). Service quality: Concepts and models. *International Journal of Quality & Reliability Management*, 11(9), 43–66. <http://doi.org/10.1108/02656719410074297>
- Gomez-Vazquez, A. M., Hernandez-Canovas, G., & Ramon-Llorens, M. C. (2018). Borrower discouragement in a bank-based economy: empirical evidence for. *Universia Business Review*, (May 2017), 144–162. <http://doi.org/10.3232/UBR.2018.V15.N1.04>
- Grilli, L. (2005). Internet start-ups access to the bank loan market: evidence from Italy. *Applied Economics*, 37(3), 293–305. <http://doi.org/10.1080/0003684042000295331>
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in Qualitative Research. In N. K. Denzin & Y. S. Lincoln (Eds.), *HAndbook of Qualitative Research* (pp. 105–117). London: Sage.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective* (Seventh Ed). New Jersey, USA: Pearson Education Inc.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (Sixth Ed.). New Jersey, USA: Pearson Education Inc.

- Han, L., Fraser, S., & Storey, D. J. (2009a). Are good or bad borrowers discouraged from applying for loans? Evidence from US small business credit markets. *Journal of Banking & Finance*, 33(2), 415–424. <http://doi.org/10.1016/j.jbankfin.2008.08.014>
- Han, L., Fraser, S., & Storey, D. J. (2009b). The role of collateral in entrepreneurial finance. *Journal of Business Finance & Accounting*, 36(May), 424–455. <http://doi.org/10.1111/j.1468-5957.2009.02132.x>
- Han, L., & Greene, F. (2007). The determinants of online loan applications from small businesses. *Journal of Small Business and Enterprise Development*, 14(3), 478–486.
- Harhoff, D., & Korting, T. (1998). Lending relationships in Germany: empirical evidence from survey data. *Journal of Banking & Finance*, 22, 1317–1353.
- Haron, S., Said, S., Jayaraman, K., & Ismail, I. (2013). Factors Influencing Small Medium Enterprises (SMES) in Obtaining Loan. *International Journal of Business and Social Science*, 4(15), 182–195.
- Haron, S., & Shanmugam, B. (1994). Lending to small business in Malaysia. *Journal of Small Business Management*, 32(4), 88–95.
- Hashi, I., & Toci, V. (2010). Financing constraints, credit rationing and financing obstacles: Evidence from firm-level data in South Eastern Europe. *Economic And Business Review*, 12(1), 29–60.
- Hashim, J. (2007). Information Communication Technology ( ICT ) Adoption Among SME Owners in Malaysia. *International Journal of Business and Information*, 2(2), 221–240. <http://doi.org/10.5897/AJBM10.1398>
- Hashim, M. K., Ahmad, S., & Zakaria, M. (2010). Internalisation incentives and problems: Insight from Malaysian SMEs. *World Review of Entrepreneurship, Management and Sustainable Development*, 1(2), 125–134.
- Hashim, M. K., & Zakaria, M. (2010). Business strategy and performance of small and medium manufacturing firms in Malaysia. *World Review of Entrepreneurship, Management and Sustainable Development*, 1(2), 100–112.
- Hassan, N., Susan, T. S. C., Jian, A. Y., & Mohd Rom, N. A. (2010). Financial Constraints and Opportunities of Micro Enterprise Entrepreneurs : A Theoretical Framework. In *International Conference on Information and Finance* (pp. 165–168).
- Hernandez-Canovas, G., & Martinez-Solano, P. (2006). Banking Relationships : Effects on Debt Terms for Small Spanish Firms \*. *Journal of Small Business Management*, 44(3), 315–333.
- Hill, F. M., Leitch, C. M., & Harrison, R. T. (2006). ‘Desperately seeking finance?’ The demand for finance by women-owned and -led businesses. In *Venture Capital* (Vol. 8, pp. 159–182). <http://doi.org/10.1080/13691060600555347>
- Holmes, S., & Kent, P. (1991). An empirical analysis of the finance structure of

- small and large Australian manufacturing enterprises. *Journal of Small Business Finance*, 1(2), 141–154.
- Howells, J. (2003). Barriers to Innovation and Technology Transfer in Services. *Technology Monitor*, 20(3), 29–34.
- Hulten, A. V. (2012). Womens access to SME finance in Australia. *International Journal of Gender and Entrepreneurship*, 4(3), 266–288. <http://doi.org/http://dx.doi.org/10.1108/BIJ-10-2012-0068>
- Hulten, A. V., & Ahmed, A. D. (2013). Migrant entrepreneurs' access to business finance in Australia. *Journal of Developmental Entrepreneurship*, 18(01), 1350003. <http://doi.org/10.1142/S1084946713500039>
- Hyytinen, A., & Pajarinen, M. (2008). Opacity of young businesses: Evidence from rating disagreements. *Journal of Banking and Finance*, 32(7), 1234–1241. <http://doi.org/10.1016/j.jbankfin.2007.10.006>
- Ismail, A. G., & Razak, A. A. (2003). Equity or debt as a security choice : Evidence from small-medium firms in Malaysia. *International Journal of Management*, 20(3), 408–417.
- Jiangli, W., Unal, H., & Yom, C. (2008). Relationship lending, accounting disclosure, and credit availability during the Asian financial crisis. *Journal of Money, Credit and Banking*, 40(1), 25–35. <http://doi.org/10.1111/j.1538-4616.2008.00103.x>
- Johanson, G. A., & Brooks, G. P. (2010). Initial scale development: Sample size for pilot studies. *Educational and Psychological Measurement*, 70(3), 394–400. <http://doi.org/10.1177/0013164409355692>
- Johnson, S., & Mitton, T. (2003). Cronyism and capital controls: Evidence from Malaysia. *Journal of Financial Economics*, 67, 351–382.
- Khwaja, A. I., & Mian, A. (2005). Do lenders favor politically connected firms ? Rent provision in an emerging financial market. *The Quarterly Journal of Economics*, 120(4), 1371–1411.
- Kon, Y., & Storey, D. J. (2003). A theory of discouraged borrowers. *Small Business Economics*, 21(1), 37.
- La Porta, R., Lopez, F., & Zamarripa, G. (2003). Related Lending. *Quarterly Journal of Economics*, 118, 231–268.
- Le, N. T. B., & Nguyen, T. V. (2009). The impact of networking on bank financing: The case of small and medium sized enterprises in Vietnam. *Entrepreneurship Theory & Practice*, (July), 867–887. <http://doi.org/10.1111/j.1540-6520.2010.00391.x>
- Lee, Y. W., Strong, D. M., Kahn, B. K., & Wang, R. Y. (2002). AIMQ: A methodology for information quality assessment. *Information and Management*, 40(2), 133–146. [http://doi.org/10.1016/S0378-7206\(02\)00043-5](http://doi.org/10.1016/S0378-7206(02)00043-5)

- Leitch, C., & Hill, F. M. (2006). Guest editorial: Women and the financing of entrepreneurial ventures: More pieces for the Jigsaw. *Venture Capital: An International Journal of Entrepreneurial Finance*, 8(1), 1–14. <http://doi.org/10.1080/13691060600555321>
- Leuz, C., & Gee, F. O. (2006). Political relationships, global financing and corporate transparency: Evidence from Indonesia. *Journal of Financial Economics*, 81, 411–439.
- Levenson, A. R., & Willard, K. (2000). Do firms get financing they want? Measuring credit rationing experience by small business in the US. *Small Business Economics*, 14(2), 83–94.
- López-Gracia, J., & Sogorb-Mira, F. (2008). Testing trade-off and pecking order theories financing SMEs. *Small Business Economics*, 31(2), 117–136. <http://doi.org/10.1007/s11187-007-9088-4>
- Love, I. (2003). Financial development and financing Constraints: International evidence from the structural investment model. *Review of Financial Studies*, 16(3), 765–791. <http://doi.org/10.1093/rfs/hhg013>
- Lucas, J. W. (2003). Theory-Testing , Generalization , and the Problem of External Validity. *Sociological Theory*, 21(3), 236–253.
- Mac an Bhaird, C. (2013). Demand for debt and equity before and after the financial crisis. *Research in International Business and Finance*, 28(1), 105–117.
- Mac an Bhaird, C., Vidal, J. S., & Lucey, B. (2016). Discouraged borrowers: Evidence for Eurozone SMEs. *Journal of International Financial Markets, Institutions and Money*, 44, 46–55.
- Machauer, A., & Weber, M. (1998). Bank behavior based on internal credit ratings of borrowers. *Journal of Banking & Finance*, 22, 1355–1383.
- Manove, M., Padilla, J., & Pagano, M. (2001). Collateral Versus Project Screening: A Model of Lazy Bank. *Journal of Economics*, 32, 726–744.
- Marshall, C., & Rossman, G. B. (2006). *Designing Qualitative Research* (4th ed.). Thousand Oaks, CA: Sage.
- Menkhoff, L., Neuberger, D., & Suwanaporn, C. (2006). Collateral-based lending in emerging markets: Evidence from Thailand. *Journal of Banking & Finance*, 30(1), 1–21. <http://doi.org/10.1016/j.jbankfin.2004.12.004>
- Merriam, S. B. (1998). *Qualitative Research and Case Study Applications in Education*. San Francisco: Jossey-Bass.
- MGCC. (2007). *Bank Negara Malaysia's SME Development Initiatives. Malaysian-German Chamber of Commerce and Industry*.
- Michaelas, N., Chittenden, F., & Poutziouris, P. (1999). Financial policy and capital structure choice in U . K . SMEs : Empirical eviden ... *Small Business Economics*, 12(2), 113–130.



- Mina, A., Lahr, H., & Hughes, A. (2013). The demand and supply of external finance for innovative firms. *Industrial and Corporate Change*, 22(4), 869–901. <http://doi.org/10.1093/icc/dtt020>
- Moha Asri, A., & Siti Khadijah, A. M. (2011). Small and medium enterprises and their financing patterns: Evidence from Malaysia. *Journal of Economics Cooperation and Development*, 32(2), 1–18.
- Mohd. Zamri, M. I. (2016, October 27). Cabaran PKS Dalam Memperoleh Pembiayaan. *Utusan Malaysia*. Kuala Lumpur. Retrieved from [www.utusanmalaysia.com.my/bisnes/cabaran-pks-dalam-memperoleh-pembiayaan-1.325005](http://www.utusanmalaysia.com.my/bisnes/cabaran-pks-dalam-memperoleh-pembiayaan-1.325005)
- Mokhtar, S. H., Nartea, G., & Gan, C. (2012). Determinants of microcredit loans repayment problem among microfinance borrowers in Malaysia. *International Journal of Business and Social Research*, 2(7), 33–45.
- Muhammad, M. Z., Char, A. K., Yasoa, M. R., & Hassan, Z. (2010). Small and medium enterprises ( SMEs ) competing in the global business environment : A case of Malaysia. *International Business Research*, 3(1), 66–75. Retrieved from <http://journal.ccsenet.org/index.php/ibr/article/view/3893>
- Myers, M. D., & Avison, D. (2002). *Qualitative Research in Information Systems*. London: Sage.
- Myers, S. C. (1984). The Capital Structure Puzzle. *Journal of Finance*, 39, 575–592.
- Myers, S. C. (2011). Capital Structure. *The Journal of Economic Perspectives*, 15(2), 81–102. <http://doi.org/10.2307/2696593>
- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investors' decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13, 187–221.
- Nguyen, T. D. K., & Ramachandran, N. (2006). Capital structure in small and medium- sized enterprises: The case of Vietnam. *Asean Economic Bulletin*, 23(2), 192–211. <http://doi.org/10.1355/AE23-2D>
- Niinimäki, J. (2009). Does collateral fuel moral hazard in banking? *Journal of Banking and Finance*, 33(3), 514–521. <http://doi.org/10.1016/j.jbankfin.2008.09.008>
- Niinimäki, J. P. (2009). Does Collateral Fuel More Moral Hazard in Banking? *Journal of Banking and Finance*, 33, 514–521.
- Noroozi, A., Mobarekeh, A. N., & Zadeh, H. F. (2010). The impact of e-commerce on export development in developing countries: A case of small and medium-sized enterprise in Iraq and Malaysia. In *International Conference on Information Management and Engineering* (pp. 435–439). Kuala Lumpur.
- Ono, A., & Uesugi, I. (2009). Role of collateral and personal guarantees in relationship lending : Evidence from Japan ' s SME loan market. *Journal of Money, Credit and Banking*, 41(5), 935–960.

- Orlikowski, W., & Baroudi, J. J. (1990). Studying information technology in organizations: Research approaches and assumptions. *Center for Digital Economy Research Stem School of Business*, 1–31. <http://doi.org/10.1287/isre.2.1.1>
- Orser, B., Riding, A., & Manley, K. (2005). Equity and equity: application and approval for financing women-owned Canadian SMEs. In *Proceedings, Administrative Sciences Association of Canada, Ryerson Polytechnic University*.
- Orser, B., Riding, A., & Manley, K. (2006). Women enterprise and financial capital. *Entrepreneurship & Regional Development*, 643–666.
- Padachi, K., Howorth, C., & Narasimhan, M. S. (2012). Working Capital Financing Preferences: The Case of Mauritian Manufacturing Small and Medium-Sized Enterprises (SMEs). *Asian Academy of Management Journal of Accounting and Finance*, 8(1), 125–157.
- Palepu, K. G. (1986). Predicting takeover targets. A methodological and empirical analysis. *Journal of Accounting and Economics*, 8(1), 3–35. [http://doi.org/10.1016/0165-4101\(86\)90008-X](http://doi.org/10.1016/0165-4101(86)90008-X)
- Pallant, J. (2010). *SPSS Survival Manual* (Fourth Ed.). Singapore: McGraw-Hill Education.
- Parasuraman, A., Zeithami, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications to future research. *Journal of Marketing*, 49(4), 41–50.
- Perry, M., & Coetzer, A. (2009). Small enterprise relations with banks and accountants. *Journal of Small Business and Enterprise Development*, 16, 306–321. <http://doi.org/10.1108/14626000910956074>
- Petersen, M. A., & Rajan, R. G. (1994). The benefits of lending relationships: Evidence from small business data. *The Journal of Finance*, 49(1), 3. <http://doi.org/10.2307/2329133>
- Pitt, L. F., Watson, R. T., & Kavan, C. B. (1995). Service quality: A measure of Information system effectiveness. *MIS Quarterly*, 19(2), 173–187.
- Rachagan, S., & Satkunasingam, E. (2009). Improving corporate governance of SMEs in emerging economies: A Malaysian experience. *Journal of Enterprise Information Management*, 22(4), 468–484.
- Raturi, M., & Swami, A. V. (1999). Explaining ethnic differentials in credit market outcomes in Zimbabwe. *Economic Development and Cultural Change*, 47(3), 585–604.
- Readers' Digest. (2001). *Great Dictionary of the English Language*. London: The Readers' Digest Association Limited.
- Reeves, C. A., & Bednar, D. A. (1994). Defining quality: Alternatives and implications. *The Academy of Management Review*, 19(3), 419–445.

- Riding, A., Orser, B., & Chamberlin, T. (2012). Investing in R & D : small- and medium- sized enterprise financing preferences. *Venture Capital*, 14(May), 37–41. <http://doi.org/10.1080/13691066.2012.654601>
- Roper, S., & Scott, J. M. (2009). Perceived financial barriers and the start-up decision: An econometric analysis of gender differences using GEM data. *International Small Business Journal*, 27(2), 149–171. <http://doi.org/10.1177/0266242608100488>
- Roslan, A. H., & Abd Karim, M. Z. (2009). Determinants of Microcredit Repayment in Malaysia : The Case of Agrobank. *Humanity & Social Sciences Journal*.
- Saad, R. M., Ghani, A. A., & Ahmad, S. (2014). Kesan sumber pembiayaan ekuiti dan hutang ke atas prestasi perniagaan PKS di Malaysia. *Sains Humanika*, 2(1), 151–157.
- Saleh, A. S., & Ndubisi, N. O. (2006). An evaluation of SME development in Malaysia. *International Review of Business Research Papers*, 2(1), 1–14.
- Sanchez, V. J., & Martin, U. J. F. (2005). Financing Preferences of Spanish Firms : Evidence on the Pecking Order Theory. *Review of Quantitative Finance and Accounting*, 25, 341–355.
- Scholtens, B. (1999). Analytical issues in external financing alternatives for SBEs. *Small Business Economics*, 12(2), 137–148.
- Scott, M., & Bruce, R. (1987). Five stages of growth in small business. *Long Range Planning*, 20(3), 45–52. [http://doi.org/10.1016/0024-6301\(87\)90071-9](http://doi.org/10.1016/0024-6301(87)90071-9)
- Sekaran, U. (2003). *Research Methods for Business: A Skill Building Approach*. New York: John Wiley & Son.
- Sekaran, U., & Bougie, R. (2010). *Research methods for business: A skill building approach* (Fifth Ed.). West Sussex, UK: John Wiley & Son.
- Seth, N., Deshmukh, S. . G., & Vrat, P. (2005). Service quality models: a review. *International Journal of Quality & Reliability Management*, 22(9), 913–949. <http://doi.org/10.1108/02656710510625211>
- Shaharudin, Z., Ahmad Basri, M. N., & Mohd Isa, M. Y. (2016). Factors Influencing Payments Behavior among Customers of Islamic Retail Financing. *Journal of Islamic Banking and Finance*, 4(2), 34–37. <http://doi.org/10.15640/jibf.v4n2a5>
- Shahawai, S. S., & Idrus, R. (2010). Pre-considered factors affecting ERP system adoption in Malaysian SMEs. In *UKM 12th International Conference on Computer Modelling and Simulation* (pp. 323–328).
- Sheng, Y. T., Rani, A. N. S., & Shaikh, J. M. (2010). Impact of SMEs character in the loan approval stage. In *International Conference on Information and Finance (ICIF)* (pp. 229–233).
- SME Annual Report Council. (2007). *The Small and Medium Enterprise*

*(SME)Annual Report.*

- SME Annual Report Council. (2009). *The small and Medium Enterprise (SME) Annual Report.*
- SME Annual Report Council. (2016). *SME Annual Report 2015.* Kuala Lumpur.
- SME Corporation Malaysia. (2011). *Economic Census 2011: Profile of SMEs.* Department of Statistics Malaysia.
- Snape, D., & Spencer, L. (2003). The Foundations of Qualitative Research. *Qualitative Research Practice: A Guide for Social Science Students and Researchers*, 2–10. <http://doi.org/10.4135/9781452230108>
- Stiglitz, J. E., & Weiss, A. (1981). Credit rationing in markets with imperfect information. *The American Economic Review*, 71(3), 393–410.
- Storey, D. J. (2004). Racial and gender discrimination in the micro firms credit market: Evidence from Trinidad and Tobago. *Small Business Economics*, 23(5), 401–422. <http://doi.org/10.1007/s11187-004-7259-0>
- Straub, D., Boudreau, M. C., & Gefen, D. (2004). Validation guidelines for IS positivist research. *Communications of the Association for Information Systems*, 13.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (Fifth Ed.). Boston, USA: Pearson Education Inc.
- Tamimi, N., & Sebastianelli, R. (1996). How firms define and measure quality. *Production & Inventory Management Journal*, 37(3), 34–39.
- Tang, Y., Deng, C., & Moro, A. (2016). Firm-bank trusting relationship and discouraged borrowers. *Review of Managerial Science*, 1–23.
- The Economist Intelligence Unit. (2009). *Surviving the drought Access to finance among small and medium- sized enterprises.* ACCA, CGA (Canada, CPA (Australia).
- The Edge. (2009a). SMEs — How to enhance your chances in getting the loan you need, (March), 6–7.
- The Edge. (2009b). Tight credit flow easing , say industry players, 1–2.
- The Edge. (2014). Maybank allocates RM1 bln in 2014 , to loan fund for SMES, (March 19), 2014.
- The World Bank. (2009). *Doing Business.*
- The World Bank. (2013a). *Doing Business 2013.* <http://doi.org/10.1596/978-0-8213-9615-5>
- The World Bank. (2013b). *Doing Business 2014: Understanding Regulations for Small and Medium-Size Enterprises.* *Doing Business 2014: Understanding Regulations for Small and Medium-Size Enterprises.* <http://doi.org/10.1596/978-0-8213-9984-2>. License: Creative Commons

- Voordeckers, W., & Steijvers, T. (2006). Business collateral and personal commitments in SME lending. *Journal of Banking & Finance*, 30(11), 3067–3086. <http://doi.org/10.1016/j.jbankfin.2006.05.003>
- Vos, E., Yeh, A. J., Carter, S., & Tagg, S. (2007). The happy story of small business financing. *Journal of Banking & Finance*, 31(9), 2648–2672. <http://doi.org/10.1016/j.jbankfin.2006.09.011>
- Watson, J. (2006). External Funding and Firms Growth: Comparing Female and Male Controlled SMEs. *Venture Capital*, 8(1), 33–49.
- Watson, J., & Everett, J. (1999). Small business failure rates: Choices of definition and industry effects. *International Small Business Journal*, 17, 33–49.
- Wattanapruttipaisan, T. (2003). Four proposals for improved financing of SME development in Asean. *Asian Development Review*, 20(2), 66–104.
- Westhead, P., & Storey, D. J. (1997). Financial constraints on the growth of high-technology small firms in the United Kingdom. *Applied Financial Economics*, 7, 197–201.
- Westhead, P., Ucbasaran, D., Wright, M., & Binks, M. (2005). Novice, serial and portfolio entrepreneur behaviour and contributions. *Small Business Economics*, 25, 109–132.
- Wicks, A. M., & Roethlein, C. J. (2009). A satisfaction-based definition of quality. *Journal of Business & Economic Studies*, 15(1), 82–98.
- Wong, K. Y., & Aspinwall, E. (2005). An empirical study of the important factors for knowledge-management adoption in the SME sector. *Journal of Knowledge Management*, 9(3), 64–82. <http://doi.org/10.1108/13673270510602773>
- Wood, R., & Bandura, a. (1989). Impact of conceptions of ability on self-regulatory mechanisms and complex decision making. *Journal of Personality and Social Psychology*, 56(3), 407–415. <http://doi.org/10.1037/0022-3514.56.3.407>
- Wooi, G. C., & Zailani, S. (2010). Green supply chain initiatives: Investigation on the barriers in the context of SMEs in Malaysia. *International Business Management*, 4(1), 20–27.
- Wu, J., Song, J., & Zeng, C. (2008). An empirical evidence of small business financing in China. *Management Research News*, 31(12), 959–975. <http://doi.org/10.1108/01409170810920666>
- Xiang, D., Worthington, A. C., & Higgs, H. (2014). Discouraged finance seekers: An analysis of Australian small and medium-sized enterprises. *International Small Business Journal*, 33(7), 1–9. <http://doi.org/10.1177/0266242613516138>
- Zadry, H. R., & Yusof, S. M. (2006). Total quality management and theory of

constraints implementation in Malaysian automotive suppliers: A survey result. *Business Excellence*, 17(8), 999–1020.

Zainol, F. A., & Ayadurai, S. (2010). Cultural background and firm performances of Indigenous (“Bumiputera”) Malay family firms in Malaysia: The role of entrepreneurial orientation as a mediating variable. *The Journal of Asia Entrepreneurship and Sustainability*, VI(1), 3–19.  
<http://doi.org/10.1093/infdis/jit785>

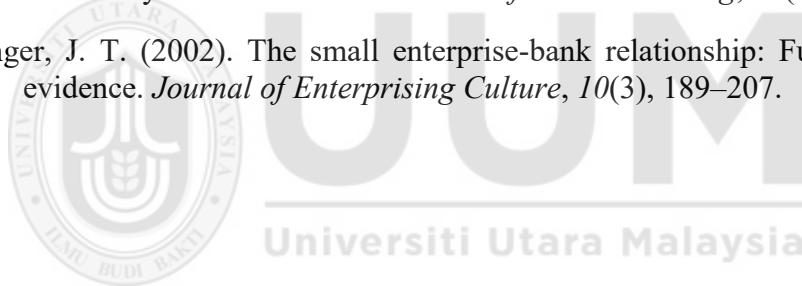
Zairani, Z., & Zaimah, Z. A. (2013). Difficulties in Securing Funding from Banks: Success Factors for Small and Medium Enterprises (SMEs). *Journal of Advanced Management Science*, 1(4), 354–357.  
<http://doi.org/10.12720/joams.1.4.354-357>

Zikmund, W. G. (2003). *Business Research Method* (7th ed.). USA: Thomson Learning.

Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology*, 81(3), 329–339.  
<http://doi.org/10.1037/0022-0663.81.3.329>

Zineldin, M. (1996). Bank-corporate client “partnership” relationship: Benefits and life cycle. *International Journal of Bank Marketing*, 14(3), 12–22.


Zinger, J. T. (2002). The small enterprise-bank relationship: Further empirical evidence. *Journal of Enterprising Culture*, 10(3), 189–207.



## APPENDICES



## Appendix A: Questionnaires (English Version)

 <p><b>Othman Yeop Abdullah Graduate School of Business</b></p> <hr/> <p><b>Universiti Utara Malaysia</b></p>	<p><b>SURVEY FORM</b></p>
<p><b>Title:</b></p> <p><b>Factors Influencing Discouraged Borrowers Towards Bank Loan Among Malaysian SMEs</b></p>	
<p><b>Survey information:</b></p> <p>This study is conducted by ROPIDAH OMAR, CA(M), a lecturer from School of Accountancy, UUM College of Business, Universiti Utara Malaysia, under supervision of Associate Professor Dr. Wan Nordin Wan Hussin, as part of her doctoral degree (PhD) requirement. The objective of the study is to identify factors and characteristics of Malaysian SMEs and owners/manager that may affect the decision making in bank loan application.</p> <p>This questionnaire consists of <b>two (2)</b> parts: (A) business and owner / manager profile; and (B) information on business activity.</p> <p><b>Contact information:</b> Researcher: ROPIDAH OMAR Email: <a href="mailto:ropidah@uum.edu.my">ropidah@uum.edu.my</a> Tel: (hp) 012 572 9605; (office) 04-928 3982; Fax: 04 928 5762</p>	
<p>Please return the completed questionnaire with the prepaid envelope to:</p> <p><b>ROPIDAH OMAR PUSAT PENGAJIAN PERAKAUNAN UUM KOLEJ PERNIAGAAN UNIVERSITI UTARA MALAYSIA 06010 SINTOK KEDAH.</b></p>	
<p>YOUR RESPONSES ARE VERY IMPORTANT FOR THE ACCURACY OF THIS STUDY. ALL INFORMATION IS TREATED AS <b>CONFIDENTIAL</b> AND WILL ONLY BE USED FOR THIS STUDY ONLY. YOUR COOPERATION IS HIGHLY APPRECIATED.</p>	



## Section A: Profile

This section asks you on the information related closely to your business and the owner-manager.

### General instruction:

Please check (/) on a box where appropriate or write down your answer where appropriate.

#### 1. Business Profile

a.	Did your business need additional capital for the past three years?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b.	Did your business apply for bank loan for the past three years?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
c.	If yes, please list down the names of the bank that your business applied for loan:	1. _____ 2. _____ 3. _____	
d.	Number of years business has established relationship with current bank:	_____ years	
e.	Is the business managed by the owner?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
f.	Approximate number of employees:	_____	
g.	Average total assets:	RM _____	

h. Average annual revenue:	RM _____
i. The year business started its operation? Eg: 2002 _____	
j. Legal status:	<input type="checkbox"/> Sole Proprietor <input type="checkbox"/> Partnership <input type="checkbox"/> Private Limited <input type="checkbox"/> Limited Company
k. Nature of operation:	<input type="checkbox"/> Manufacturing <input type="checkbox"/> Manufacturing Related Services <input type="checkbox"/> Services (including ICT) <input type="checkbox"/> Constructions Other: (please specify) _____

2. Owner-manager Profile:

a. Please specify the gender of the owner.	<input type="checkbox"/> Male	<input type="checkbox"/> Female
b. Number of years handling business ( owner's experience): _____ years		
c. Does the experience in (b) related to current business?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

d. Please state the ethnicity of the owner.

☐

Malay

☐

Chinese

☐

Indian

☐

Other (please state)

\_\_\_\_\_

e. Owner's highest education level:

☐

SPM

☐

STPM/Certificate

☐

Diploma

☐

Degree

☐

Professional Qualification

☐

Masters and PhD

☐

Other (please state)

\_\_\_\_\_

f. The age of the owner in range:

☐

20 - 29

☐

30 - 39

☐

40 - 49

☐

50 and above



UUM  
Universiti Utara Malaysia

## Section B: Business's Activity

This section considers factors that likely to be related to your decisions in bank loan application.

**General instruction:** Please circle the best answer that represents your business.

### 1. Quality of Business

The followings reflect the quality of your company:

#### 1.1 Accounting Information

	Not at all true	Not very true	Some -what true	Very true
a. The business's financial statement is prepared by qualified accounting staff (Member of Malaysian Institute of Accountant).	1	2	3	4
b. The business's financial statement is prepared by external accountant engaged by the company.	1	2	3	4
c. The business's financial statement is audited.	1	2	3	4
d. The business does not engage any internal or external accountant.	1	2	3	4

#### 1.2 Innovativeness

	Not at all true	Not very true	Some -what true	Very true
a. The business frequently tries out new ideas.	1	2	3	4
b. The business seeks out new ways to do things.	1	2	3	4
c. The business is creative in its methods of operation.	1	2	3	4
d. The business is often the first to market with new products and services.	1	2	3	4

### 1.3 Availability of Collateral

		Not at all true	Not very true	Some -what true	Very true
a.	The business has sufficient assets to be used as collateral to the bank.	1	2	3	4
b.	The business uses its OWN assets as collateral to the bank.	1	2	3	4
c.	The business uses its OWNER'S personal assets as collateral to the bank.	1	2	3	4
d.	The business has NO problem in providing collateral for bank loan purposes.	1	2	3	4

### 2. Relationship with the bank

The following assess the relationship between your business and the bank.

		Not at all true	Not very true	Some- what true	Very true
a.	The business maintains a continuous and good relationship with current bank.	1	2	3	4
b.	The relationship with the current bank started since the commencement of the business's operation.	1	2	3	4
c.	The business is considered a regular customer to the bank.	1	2	3	4
d.	The business has no intention to change to other bank.	1	2	3	4
e.	The business maintains accounts and apply loan from the same bank.	1	2	3	4
f.	The business deals with only one single bank for all banking activities.	1	2	3	4
g.	The business always searches out for best loan offer from few banks before submitting loan application to only one bank.	1	2	3	4

h.	The business submits loan application form to a few banks and accepts the best offer.	1	2	3	4
----	---	---	---	---	---

### 3. Application costs

The following questions assess the financial, in-kind and psychic costs that are related to the application for the bank loan.

		Not at all true	Not very true	Some -what true	Very true
a	The business sought professional advice before applying for loan.	1	2	3	4
b	The business engaged professional consultant in preparing documents for loan application purpose.	1	2	3	4
c	The business spends more time for meeting with bank officer before submitting the application for bank loan.	1	2	3	4
d	The business prefers to deal with bank officer and submit application form via online.	1	2	3	4
e	The business is willing to share information that is deemed confidential with the bank.	1	2	3	4
f	The business is willing to share information that is deemed confidential with outside consultant.	1	2	3	4

### 4. Alternative Financing

This part evaluates your alternative financing other than loan from bank.

		Never	Some - times	Often	Very often
a.	The business obtains loan/grant from government agency.	1	2	3	4
b	The business obtains loan from family and friends.	1	2	3	4

c.	The business obtains loan from unlicensed loan providers.	1	2	3	4
----	---	---	---	---	---

d	The business gets credit from suppliers easily.	1	2	3	4
---	---	---	---	---	---

e Other sources (please state) :

## 5. Political Connection

The following relates to your business relationship with government and politics.

	Never	Some- times	Often	Very often
a The business's owner is actively involved in the politics.	1	2	3	4
b The business often granted with contracts by government offices/agencies.	1	2	3	4
c Large number of business's sales is related to the government or it agencies.	1	2	3	4
d The business contributes some amount of money to political party during election campaign.	1	2	3	4

Thank you for your time completing this questionnaire. Your cooperation in providing those information is highly appreciated. If you like to share other information related to this survey, please do not hesitate to write them in the space provided below.

---



---



---



---

End of questionnaire. Thank You.

## Appendix B: Questionnaires (Bahasa Malaysia Version)

 <p>Othman Yeop Abdullah Graduate School of Business <b>Universiti Utara Malaysia</b></p>	<p><b>BORANG KAJISELIDIK</b></p>
<p><b>Tajuk kajian:</b></p> <p><b>Faktor Penyumbang Kepada Peminjam Tawar Hati Terhadap Pinjaman Bank Di Kalangan PKS Malaysia</b></p>	
<p><b>Maklumat kajian:</b></p> <p>Kajian ini dijalankan oleh ROPIDAH OMAR, CA(M), pensyarah dari Pusat Pengajian Perakaunan, UUM Kolej Perniagaan, Universiti Utara Malaysia, di bawah seliaan Professor Madya Dr. Wan Nordin Wan Hussin, sebagai sebahagian dari keperluan pengajian peringkat ijazah doktor falsafah (PhD) beliau. Kajian ini bertujuan mengenalpasti faktor dan karakter-karakter di kalangan perniagaan kecil dan sederhana Malaysia dan juga pemilik/pengurus yang boleh mempengaruhi pembuatan keputusan dalam permohonan pinjaman bank.</p> <p>Kertas kajiselidik ini terbahagi kepada dua (2) bahagian: (A) profil perniagaan dan pemilik / pengurus; dan (B) maklumat aktiviti perniagaan.</p> <p><b>Maklumat perhubungan:</b> Pengkaji: ROPIDAH OMAR Email: <a href="mailto:ropidah@uum.edu.my">ropidah@uum.edu.my</a> Tel: (hp) 012 572 9605; (pej) 04-928 3982; Fax: 04 928 5762</p>	
<p>Sila kembalikan borang kajiselidik yang telah lengkap dengan menggunakan sampul berbayar kepada:</p> <p><b>ROPIDAH OMAR PUSAT PENGAJIAN PERAKAUNAN UUM KOLEJ PERNIAGAAN UNIVERSITI UTARA MALAYSIA 06010 SINTOK KEDAH.</b></p>	
<p>RESPONS DARI PIHAK TUAN/PUAN ADALAH AMAT PENTING BAGI KETEPATAN KAJIAN INI. SEMUA MAKLUMAT ADALAH DIANGGAP <b>SULIT</b> DAN AKAN DIGUNAKAN UNTUK TUJUAN KAJIAN INI SEMATA-MATA. KERJASAMA DARI PIHAK TUAN/PUAN AMAT DIHARGAI.</p>	



## Bahagian A: Profil

Bahagian ini berkenaan maklumat perniagaan dan pemilik.

**Arahan:** Sila tandakan (/) dalam kotak yang berkenaan atau tuliskan jawapan anda yang mana bersesuaian.

### 1. Profil Perniagaan

a.	Adakah perniagaan anda memerlukan modal tambahan dalam jangkamasa tiga tahun yang lepas?	<input type="checkbox"/>	Ya	<input type="checkbox"/>	Tidak
b.	Pernahkah perniagaan anda memohon pinjaman dari mana-mana bank dalam jangkamasa tiga tahun yang lepas?	<input type="checkbox"/>	Ya	<input type="checkbox"/>	Tidak
c.	Jika YA, bolehkan anda senaraikan nama bank di mana pinjaman dipohon:	1. _____ 2. _____ 3. _____			
d.	Bilangan tahun perniagaan anda menjalin hubungan dengan bank sekarang:	_____ tahun			
e.	Adakah perniagaan anda diuruskan oleh pemilik sendiri?	<input type="checkbox"/>	Ya	<input type="checkbox"/>	Tidak
f.	Anggaran jumlah pekerja :	_____ orang			
g.	Anggaran jumlah aset:	RM _____			

h. Anggaran pendapatan tahunan:	RM _____
i. Tahun memulakan perniagaan? Contoh: 2002 _____	
j. Status perniagaan:	<input type="checkbox"/> Pemilikan tunggal <input type="checkbox"/> Perkongsian <input type="checkbox"/> Sendirian Berhad <input type="checkbox"/> Syarikat Berhad
k. Bidang operasi:	<input type="checkbox"/> Perkilangan <input type="checkbox"/> Perkhidmatan berkaitan perkilangan <input type="checkbox"/> Perkhidmatan (termasuk ICT) <input type="checkbox"/> Pembinaan Lain-lain: (sila nyatakan) _____

2. Profil Pemilik:

a. Sila nyatakan jantina pemilik.	<input type="checkbox"/> Lelaki	<input type="checkbox"/> Perempuan
b. Bilangan tahun pengalaman mengendalikan perniagaan: _____ tahun		
c.	<input type="checkbox"/> Ya	<input type="checkbox"/> Tidak

Adakah pengalaman di b. berkaitan dengan perniagaan sekarang?	
d. Sila nyatakan kaum pemilik.	<input type="checkbox"/> Melayu <input type="checkbox"/> China <input type="checkbox"/> India <input type="checkbox"/> Lain-lain (sila nyatakan) _____
e. Kelulusan akademik tertinggi:	<input type="checkbox"/> SPM <input type="checkbox"/> STPM/Sijil <input type="checkbox"/> Diploma <input type="checkbox"/> Ijazah Pertama <input type="checkbox"/> Kelayakan Professional <input type="checkbox"/> Masters atau PhD <input type="checkbox"/> Lain-lain (sila nyatakan) _____
f. Umur pemilik:	<input type="checkbox"/> 20 - 29 <input type="checkbox"/> 30 - 39 <input type="checkbox"/> 40 - 49 <input type="checkbox"/> 50 dan ke atas

## Bahagian B: Aktiviti Perniagaan

Bahagian ini berkaitan dengan faktor-faktor yang dijangkakan mempunyai kaitan dengan keputusan perniagaan anda untuk membuat permohonan pinjaman kepada bank.

**Arahan:** Sila bulatkan jawapan yang paling sesuai dengan perniagaan anda.

### 1. Kualiti Perniagaan

Perkara di bawah adalah berkenaan dengan kualiti perniagaan anda:

#### 1.1 Maklumat Kewangan

	Tidak benar	Kurang benar	Benar	Sanga t benar
a. Penyata kewangan perniagaan disediakan oleh staf yang merupakan akauntan bertauliah (ahli Malaysian Institute of Accountant).	1	2	3	4
b. Penyata kewangan syarikat disediakan oleh akauntan luar yang diupah oleh perniagaan.	1	2	3	4
c. Penyata kewangan perniagaan telah diaudit.	1	2	3	4
d. Perniagaan tidak mengupah mana-mana staf akauntan dalaman dan juga dari luar.	1	2	3	4

#### 1.2 Inovasi

	Tidak benar	Kurang benar	Benar	Sanga t benar
a. Perniagaan selalu mencuba idea-idea baru.	1	2	3	4
b. Perniagaan selalu mempunyai pendekatan berlainan dalam membuat sesuatu perkara.	1	2	3	4
c. Perniagaan sangat kreatif dalam mengendalikan operasi.	1	2	3	4
d. Perniagaan selalu menjadi yang pertama dalam memasarkan produk dan juga perkhidmatan yang baru.	1	2	3	4

### 1.3 Kewujudan Cagaran

	Tidak benar	Kurang benar	Benar	Sangat benar
a. Perniagaan mempunyai asset yang mencukupi sebagai cagaran kepada bank.	1	2	3	4
b. Perniagaan menggunakan asset SENDIRI (atas nama perniagaan) sebagai cagaran kepada bank.	1	2	3	4
c. Perniagaan menggunakan asset PEMILIK (atas nama pemilik) sebagai cagaran kepada bank.	1	2	3	4
d. Perniagaan tidak bermasalah dalam menyediakan cagaran kepada bank untuk tujuan pinjaman.	1	2	3	4

### 2. Hubungan dengan bank

Perkara di bawah menilai perhubungan antara syarikat anda dengan bank.

	Tidak benar	Kurang benar	Benar	Sangat benar
a. Perniagaan mempunyai hubungan yang baik dan berterusan dengan bank sekarang.	1	2	3	4
b. Hubungan dengan bank sekarang bermula sejak perniagaan mula beroperasi.	1	2	3	4
c. Perniagaan merupakan pelanggan tetap kepada bank.	1	2	3	4
d. Perniagaan tidak berhasrat bertukar kepada bank lain.	1	2	3	4
e. Perniagaan mempunyai akaun dan memohon pinjaman dari bank yang sama.	1	2	3	4
f. Perniagaan berurusan dengan satu bank sahaja untuk semua urusan perbankan.	1	2	3	4

g.	Perniagaan biasanya meneliti tawaran pinjaman dari banyak bank dan memilih yang terbaik untuk memohon pinjaman.	1	2	3	4
----	---	---	---	---	---

h.	Perniagaan membuat permohonan pinjaman kepada beberapa bank dan hanya menerima tawaran yang terbaik.	1	2	3	4
----	--	---	---	---	---

### 3. Kos permohonan

Soalan-soalan di bawah adalah berkenaan dengan kos yang terlibat dengan permohonan pinjaman dari bank.

	Tidak benar	Kurang benar	Benar	Sangat benar
a.	1	2	3	4

Perniagaan mendapatkan nasihat dari professional sebelum membuat permohonan pinjaman kepada bank.

b.	1	2	3	4
----	---	---	---	---

Perniagaan mengupah konsultan professional untuk menyediakan dokumen yang berkaitan dengan permohonan pinjaman.

c.	1	2	3	4
----	---	---	---	---

Perniagaan meluangkan banyak masa bertemu dengan pegawai bank sebelum menyerahkan borang permohonan pinjaman kepada pihak bank.

d.	1	2	3	4
----	---	---	---	---

Perniagaan lebih berurusan dengan pihak bank dan membuat permohonan pinjaman melalui talian.

e.	1	2	3	4
----	---	---	---	---

Perniagaan sedia berkongsi maklumat sulit tentang perniagaan dengan pihak bank.

f.	1	2	3	4
----	---	---	---	---

Perniagaan sedia berkongsi maklumat sulit tentang perniagaan dengan pihak konsultan luar.

#### 4. Pembiayaan alternatif

Perkara di bawah berkenaan dengan pembiayaan-pembiayaan alternatif selain dari bank.

	Tidak pernah	Kadang - kadang	Kerap	Sang at kerap
a. Perniagaan mendapat pinjaman/geran dari agensi kerajaan.	1	2	3	4
b. Perniagaan mendapat pinjaman dari keluarga dan rakan-rakan.	1	2	3	4
c. Perniagaan mendapat pinjaman dari pemberi pinjaman yang tidak berlesen.	1	2	3	4
d. Perniagaan senang mendapat kredit dari pembekal.	1	2	3	4
e. Sumber pembiayaan lain (sila nyatakan) :				

#### 5. Kaitan politik

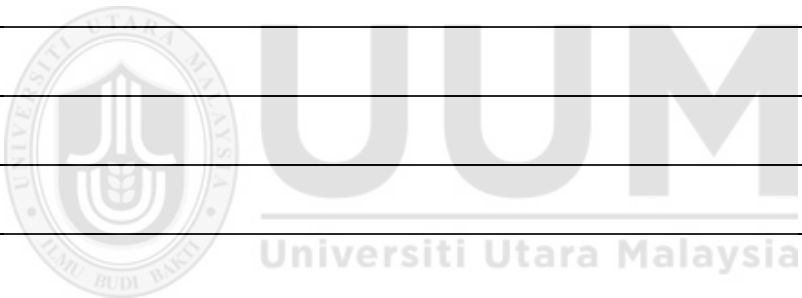
Perkara di bawah adalah berkenaan dengan kaitan perniagaan dengan pihak kerajaan atau parti politik.

	Tidak pernah	Kadang- kadang	Kera p	Sangat kerap
a. Pemilik perniagaan seorang yang aktif dalam politik.	1	2	3	4
b. Perniagaan selalu mendapat kontrak/kerja dengan pejabat-pejabat kerajaan atau ajensinya.	1	2	3	4

c.	Sebahagian besar dari pendapatan perniagaan adalah hasil dari kerja-kerja berkaitan pejabat kerajaan atau ajensinya.	1	2	3	4
----	---	---	---	---	---

d.	Perniagaan ada memberi sumbangan keuangan kepada mana-mana parti politik semasa kempen pilihanraya.	1	2	3	4
----	---	---	---	---	---

Terima kasih kerana meluangkan masa menjawab soalan-soalan di atas. Kerjasama pihak anda dalam memberikan maklumat-maklumat di atas adalah sangat dihargai. Jika pihak anda mempunyai sebarang maklumat berkaitan dengan kajian ini, sila nyatakan dalam ruangan di bawah.




---



---



---



---



---



---

Tamat. Terima kasih.

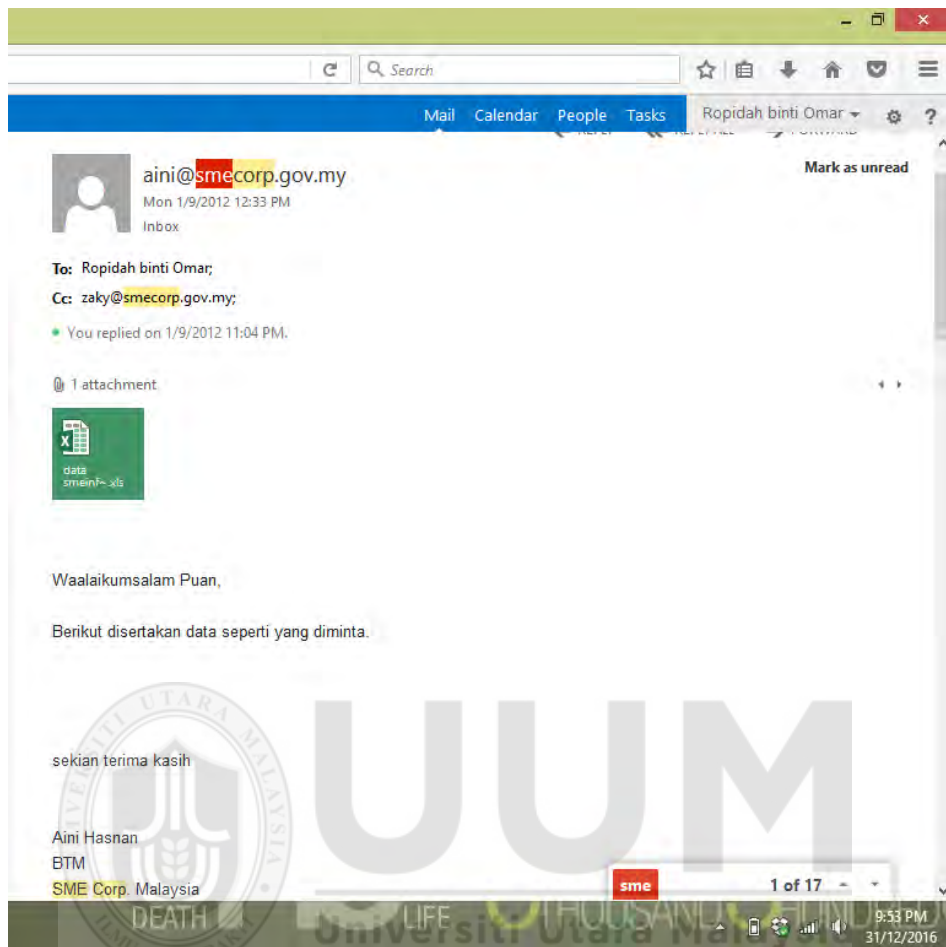


## Appendix C: Correspondence


### 1. Email to SME Corp – request for data



## 2. Email from SME Corp – supply of data



### 3. Initial letter to respondents



**UNIVERSITI UTARA MALAYSIA**  
06010 UUM Sintok, Kedah Darul Aman, Malaysia. Tel: 604 - 928 4000  
*Othman Yeop Abdullah Graduate School of Business*

20 Disember 2011

Respondens yang dihormati,

**PER: KAJIAN – FAKTOR PENYUMBANG KEPADA PEMINJAM TAWAR HATI TERHADAP PINJAMAN BANK DI KALANGAN PKS MALAYSIA (FACTORS INFLUENCING DISCOURAGED BORROWERS TOWARDS BANK LOAN AMONG MALAYSIAN SMEs)**

Kerajaan Malaysia dalam menggalakkan pertumbuhan ekonomi yang sebahagian besarnya terdiri dari Industri Kecil dan Sederhana (PKS/SME), telah menyediakan banyak kemudahan dari segi prasarana, pemasaran dan juga pembiayaan. Di sebalik usaha murni kerajaan itu, terdapat keluhan di kalangan PKS tentang kesukaran dalam mendapatkan pinjaman dari bank. Masalah cagaran dan maklumat berkaitan perniagaan adalah antara faktor penyumbang kepada kesukaran mendapatkan pinjaman dari bank.

Kajian ini cuba melihat permasalahan ini dari perspektif PKS sendiri, iaitu cuba mengenalpasti karekter-karekter bakal peminjam yang berpotensi dan faktor-faktor yang mempengaruhi mereka dalam pembuatan keputusan berkaitan dengan permohonan pinjaman bank.

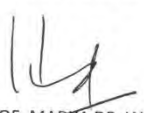
Untuk tujuan itu, disertakan dua (2) set soalan-soalan kajian iaitu dalam Bahasa Malaysia dan Bahasa Inggeris. Tuan/puan hanya perlu menjawab dan pulangkan satu set sahaja dengan menggunakan sampul berbayar yang disediakan.





Responden sasaran bagi kajian ini adalah pemilik atau pengurus perniagaan, sekiranya tuan/puan bukan seperti sasaran tersebut, diharap pihak tuan/puan dapat menyerahkan soalan kajian ini kepada pihak yang berkaitan.

Pihak kami menjamin kerahsiaan semua maklumat yang terkandung dalam soalan kajian ini, dan ianya hanyalah untuk tujuan kajian semata-mata.


Kerjasama dan perhatian dari pihak tuan/puan amat dihargai.

Sekian, terima kasih.

  
PROF. MADYA DR. WAN NORDIN WAN HUSSIN  
Penyelia PhD



#### 4. First reminder



**UNIVERSITI UTARA MALAYSIA**  
06010 UUM Sintok, Kedah Darul Aman, Malaysia. Tel: 604 - 928 4000

*School of Accountancy, UUM College of Business*

25 Mac 2012

Respondens yang dihormati,

PER: **KAJIAN – FAKTOR PENYUMBANG KEPADA PEMINJAM TAWAR HATI TERHADAP PINJAMAN BANK DI KALANGAN PKS MALAYSIA (FACTORS INFLUENCING DISCOURAGED BORROWERS TOWARDS BANK LOAN AMONG MALAYSIAN SMEs)**

Merujuk kepada perkara di atas dan surat kami bertarikh 20 Disember 2011. Pihak kami amat berbesar hati sekiranya pihak tuan/puan dapat memberi respons kepada kajian kami dengan mengisi dengan lengkap soalan-soalan kajian yang disertakan dengan surat sebelum ini.

Untuk pengetahuan pihak tuan/puan, kajian ini mendapat kerjasama dari pihak SME Corporation (SMECorp) dengan membekalkan data tentang nama dan alamat syarikat tuan/puan yang dipilih secara rawak.

Kerjasama dari pihak tuan/puan amat diharapkan dan dapat membantu kami mendapatkan gambaran sebenar tentang isu di atas. Hasil dapatan dari kajian ini dijangka dibentangkan di peringkat kebangsaan dan antarabangsa, dan diharap akan mendapat perhatian dari pihak-pihak yang berkaitan.

Tuan/puan juga boleh memberi respons melalui talian berikut:


<http://kwiksurveys.com/?u=versibahasamalaysia>

Atau





<http://kwiksurvey.com/?u=englishversion>

Sekian, kerjasama dan perhatian dari pihak tuan/puan amat dihargai.

Sekian, terima kasih.



ROPIDAH OMAR, CA(M)



**UUM**  
Universiti Utara Malaysia



## Appendix D: Conference Proceedings / Publication

1. Bank Loan Application: Profile of Discouraged Malaysian SMEs, International Conference on Information in Business and Technology Management (I2BM), 2016, 25-28 January, Melaka, Malaysia

2016 Applied Mathematics in Science and Engineering International Conference (APPEMSE)  
2016 International Symposium of Information and Internet Technology (SYMINTech)  
2016 International Conference on Information in Business and Technology Management (I2BM)  
26-28 January 2016, Melaka, Malaysia

**9:45 Challenges in CSR Engagements: The Case of Bank Islam**

Fathiyah Abu Bakar and Mohd. Atif Md. Yusof (Universiti Utara Malaysia, Malaysia)

**10:00 Bank Loan Application: Profile of Discouraged Malaysian SMEs**

Ropidah Omar and Wan Nordin Wan Hussin (Universiti Utara Malaysia, Malaysia)

**10:15 Environmental Cost and Environmental Performance in Malaysian Small-Medium Enterprises**

Che Zuriana Muhammad Jamil (Universiti Utara Malaysia & College of Business, Malaysia); Rapih Mohamed (Universiti Utara Malaysia, Malaysia)

**I2BM\_DAY01\_SESSION\_02: I2BM DAY ONE - SESSION 02**

Room: Meeting Room - Juvenile

Chairs: Surachart Buachum (Chandrasekhar Rajabhat University & Naresuan University, Thailand); Mazida Ismail (Universiti Teknikal Malaysia, Malaysia)

**8:00 Strategic Orientations and New Product Success: The Mediating Impact of Innovation Speed**

Siti Norhasmaedayu Mohd Zamani, Asmat Nizam Abdul Talib and Hasbullah Ashari (Universiti Utara Malaysia, Malaysia)

**8:15 Analytical Approach to the Household Income and Expenditure in Slovakia**

Anna Antonyová (University of Prešov in Prešov, Slovakia); Sasitharan Nagapan (Universiti Tun Hussein Onn Malaysia (UTHM), Malaysia); Abd Halid Abdullah (Universiti Tun Hussein Onn Malaysia, Malaysia)

**8:30 Obesity and the Role of Malaysian Slimming Centre Health Technologies**

Hasliza Hassan (Multimedia University, Malaysia); Abu Bakar Sade (UCSI University, Malaysia); Muhammad Sabbir Rahman (International Islamic University Malaysia, Malaysia)

**8:45 Qualitative Profiling of Quality of Life Using Geographic Information System: A Case of Coastal Population**

Lazim Abdullah and Xiou Qing See (Universiti Malaysia Terengganu, Malaysia)

**9:00 The Recommendation of Tourist Attraction on Chai-Nat Province Using User Travel Patterns From Social Media Data Sharing**

Surachart Buachum (Chandrasekhar Rajabhat University & Naresuan University, Thailand); Phattaramon Klaasa (Chandrasekhar Rajabhat University, Thailand); Punnee Sittidech (Naresuan University & Faculty of Science, Thailand)

**9:15 Analysis and Comparison of Forecasting Methods for Thai Garment Export Industry**

Surachart Buachum (Chandrasekhar Rajabhat University & Naresuan University, Thailand); Kwanruetai Boonyasana (Rajamangala University of Technology Phranakorn, Thailand); Chakrit Sae Namahoot (Naresuan University, Thailand); Punnee Sittidech (Naresuan University & Faculty of Science, Thailand)

2. Bank Loan Application: Profile of Discouraged Malaysian SMEs,  
Information, Volume 19, No. 8(A), pp.3075-3080

INFORMATION  
Volume 19, Number 8(A), pp.3075-3080

ISSN 1343-4500 eISSN 1344-8994  
©2016 International Information Institute

**Bank Loan Application: A Profile of Discouraged Malaysian SMEs**

Ropidah Omar\*, Wan Nordin Wan Hussin\*\*

*\*School of Accountancy, Universiti Utara Malaysia, 06010 Sintok, Kedah, Malaysia  
E-mail:ropidah@uam.edu.my*

*\*\*Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia, 06010 Sintok, Kedah, Malaysia*

**Abstract**

The contribution of small and medium-sized enterprises (SMEs) towards the economy of a country is crucial. Many studies examined loan applications by SMEs from the bankers' perspectives and have identified various factors that resulted in banks rejecting loan applications. This study considers the other perspective that is to identify the characteristics of SMEs that are discouraged from applying bank loans. Self-administered questionnaires were distributed to a randomly selected sample of Malaysian SMEs registered with SME Corporations. Chi-square test of independence and independent group t-test results show that size, age and the legal status are significant predictors of SMEs being discouraged from applying loan from banks. The study provides useful input to bankers or loan provider to consider small and opaque firms in marketing their services.

**Key Words:** Small and medium-sized enterprises (SMEs), bank loan, discouraged borrower, firm characteristics

**1. Introduction**

Small and medium-sized enterprises (SMEs) play an important role in the economy of most countries. According to Economic Census 2011, SMEs represent 97.3 percent of business establishments in Malaysia, and 99.2 percent in 2005 Census [1]. Being one of the key players in the economy, SMEs must be able to operate sustainably and compete in a highly competitive environment. The most crucial aspect to look at is financing the business operation, where most of the SMEs seem to rely heavily upon outside financing especially in the initial and the expansion stages of development [2,3,4].

Because of the importance of SMEs in the economy, the Malaysian government has formed a group of banks called "Development Financial Institutions" (DFIs) in addition to other financial institutions and government agencies that offer financial assistance to SMEs. The World Bank has ranked Malaysia as the first economy in getting credit for five consecutive years 2009 - 2013 [5].

However, Economic Census 2011 reported that 57.6 percent of SMEs financed their businesses from internally generated funds, almost similar to the figure of 55.9 percent in